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BULLETIN

6 SEP 1939
PURCHASED

OF THE

BRITISH ORNITHOLOGISTS' CLUB.

EDITED BY

CAPT. C. H. B. GRANT.

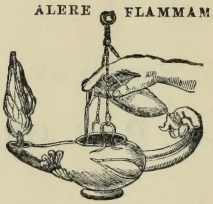
VOLUME LIX.

SESSION 1938–1939.

LONDON:

H. F. & G. WITHERBY, 326 HIGH HOLBORN, W.C. 2.

1939.



PRINTED BY TAYLOR AND FRANCIS, LTD.,
RED LION COURT, FLEET STREET.

6 SEP 1939
PURCHASED

PREFACE.

THE number of attendances during the past Session was :— 339 members, 33 members of the B. O. U., and 176 guests— a total of 548.

Dr. A. Landsborough-Thomson, Chairman of the Club, gave his annual address at the December Meeting, dealing with general matters, and a Regional Review from November 1, 1937, to October 31, 1938.

Among the many interesting communications and exhibitions during the Session were—Dr. D. A. Bannerman's exhibition of a nestling Storm Petrel from the Canary Islands ; Mr. C. L. Collenette's remarks on the Wild Life of Richmond Park ; Mr. R. A. Falla's remarks on Wild Life in New Zealand ; Mr. R. E. Moreau's talk on Parental care of African Swallows and Swifts ; Dr. A. S. Parke's remarks on the Physiological Basis of Plumage Characters ; Colonel W. A. Payn's exhibition of British semi-albino Birds ; Mr. C. R. Stonor's exhibition of a British-killed Killdeer Plover ; Presentation of the Godman-Salvin Medal to Mr. H. F. Witherby ; Mr. H. F. Witherby's exhibition of a British-taken specimen of the Yellow-billed Cuckoo.

Films, slides and photographs were shown by—Mr. R. Atkinson, Miss P. Barclay-Smith, Dr. Berry, Mr. A. H. Chisholm, Mr. B. G. Harrison, Monsieur Léon Lippens, Miss C. Longfield, Dr. P. H. Manson-Bahr, Colonel R. Meinertzhagen, Dr. K. Morris, Mr. C. A. Norris, Mr. C. R. Stonor.

New forms were described by—Dr. D. A. Bannerman, Mr. C. W. Benson, Monsieur J. Berlioz, Major F. O. Cave, Mr. P. A. Clancey, Monsieur Jean Delacour, Capt. C. H. B. Grant, Mr. J. C. Greenway, Marquess Hachisuka, Dr. Andrew Kleiner, Mr. C. W. Mackworth-Praed, Mr. G. M. Mathews, Colonel R. Meinertzhagen, Professor O. Neumann, Mr. C. R. Stonor, Mr. A. J. van Rossem, Dr. van Someren, Mr. H. Whistler, Marquess Yamashina.

The Club entertained as distinguished guests—Mr. R. Atkinson, Mr. A. H. Chisholm, Mr. C. L. Collenette, Mr. R. A. Falla, Monsieur Léon Lippens, Mrs. R. E. Moreau, Dr. K. Morris, Dr. A. S. Parkes, Dr. C. C. Sanborn, Mrs. Webb.

CLAUDE H. B. GRANT,
Editor.

London, July 1939.

BRITISH ORNITHOLOGISTS' CLUB.

(Founded October 5, 1892.)

TITLE AND OBJECTS.

The objects of the Club, which shall be called the "British Ornithologists' Club," are the promotion of social intercourse between Members of the British Ornithologists' Union and to facilitate the publication of scientific information connected with ornithology.

RULES.

(*As amended, October* 12, 1938.)

Management.

I. The affairs of the Club shall be managed by a Committee, to consist of a Chairman, who shall be elected for three years, at the end of which period he shall not be eligible for re-election for the next term ; two Vice-Chairmen, who shall serve for one year, and who shall not be eligible for the next year ; an Editor of the 'Bulletin,' who shall be elected for five years, at the end of which period he shall not be eligible for re-election for the next term ; a Secretary and a Treasurer, who shall each be elected for a term of one year, but who shall be eligible for re-election. There shall be in addition four other Members, the senior of whom shall retire each year, and another Member be elected in his place ; every third year the two senior Members shall retire and two other Members be elected in their place. Officers and Members of the Committee shall be elected by the Members of the Club at a General Meeting, and the names of such Officers and Members of Committee nominated by the Committee for the ensuing year shall be circulated with the notice convening the General Meeting at least two weeks before the Meeting. Should any Member wish to propose another candidate, the nomination of such, signed by at least two Members, must reach the Secretary at least one clear week before the Annual General Meeting.

II. Any Member desiring to make a complaint of the manner in which the affairs of the Club are conducted must communicate in writing with the Chairman, who will, if he deem fit, call a Committee Meeting to deal with the matter.

III. If the conduct of any Member shall be deemed by the Committee to be prejudicial to the interests of the Club, he may be requested by the Committee to withdraw from the Club. In the case of refusal, his name may be removed from the list of Members at a General Meeting, provided that, in the notice calling the Meeting, intimation of the proposed resolution to remove his name shall have been given, and that a majority of the Members voting at such Meeting record their votes for his removal.

Subscriptions.

IV. Any Member of the British Ornithologists' Union may become a Member of the Club on payment to the Treasurer of an entrance-fee of one pound and a subscription of one guinea for the current Session. On Membership of the Union ceasing, Membership of the Club also ceases.

Any Member who has not paid his subscription before the last Meeting of the Session shall cease, *ipso facto*, to be a Member of the Club, but may be reinstated on payment of arrears.

Any Member who has resigned less than five years ago may be reinstated without payment of another Entrance Fee.

Any Member who resigns his Membership on going abroad may be readmitted without payment of a further Entrance Fee at the Committee's discretion.

Temporary Associates.

V. Members of the British Ornithologists' Union who are ordinarily resident outside the British Isles, and ornithologists from the British Empire overseas or from foreign countries, may be admitted at the discretion of the Committee as Temporary Associates of the Club for the duration of any visit to the British Isles not exceeding one Session. An entrance fee of five shillings shall be payable in respect of every such admission

if the period exceeds three months. The privileges of Temporary Associates shall be limited to attendance at the ordinary meetings of the Club and the introduction of guests.

Meetings.

VI. The Club will meet, as a rule, on the second Wednesday in every month, from October to June inclusive, at such hour and place as may be arranged by the Committee, but should such Wednesday happen to be Ash Wednesday, the Meeting will take place on the Wednesday following. At these Meetings papers upon ornithological subjects will be read, specimens exhibited and described, and discussion invited.

VII. A General Meeting of the Club shall be held on the day of the October Meeting of each Session, and the Treasurer shall present thereat the Balance-sheet and Report; and the election of Officers and Committee, in so far as their election is required, shall be held at such Meeting.

VIII. A Special General Meeting may be called at the instance of the Committee for any purpose which they deem to be of sufficient importance, or at the instance of not fewer than fifteen Members. Notice of not less than two weeks shall be given of every General and Special General Meeting.

Introduction of Visitors.

IX. Members may introduce visitors at any ordinary Meeting of the Club, but the same guest shall not be eligible to attend on more than three occasions during the Session. No former Member who has been removed for non-payment of subscription, or for any other cause, shall be allowed to attend as a guest.

'Bulletin' of the Club.

X. An Abstract of the Proceedings of the Club shall be printed as soon as possible after each Meeting, under the title of the 'Bulletin of the British Ornithologists' Club,' and shall be distributed gratis to every Member who has paid his subscription.

Contributors are entitled to six free copies of the 'Bulletin,' but if they desire to exercise this privilege they must give notice to the Editor when their manuscript is handed in. Members purchasing extra copies of the 'Bulletin' are entitled to a rebate of 25 per cent. on the published price, but not more than two copies can be sold to any Member unless ordered before printing.

Descriptions of new species may be published in the 'Bulletin,' although such were not communicated at the Meeting of the Club. This shall be done at the discretion of the Editor and so long as the publication of the 'Bulletin' is not unduly delayed thereby.

Any person speaking at a Meeting of the Club shall be allowed subsequently—subject to the discretion of the Editor—to amplify his remarks in the 'Bulletin,' but no fresh matter shall be incorporated with such remarks.

XI. No communication, the whole or any important part of which has already been published elsewhere, shall be eligible for publication in the 'Bulletin,' except at the discretion of the Editor; and no communication made to the Club may be subsequently published elsewhere without the written sanction of the Editor.

Alteration and Repeal of Rules.

XII. Any suggested alteration or repeal of a standing rule shall be submitted to Members to be voted upon at a General Meeting convened for that purpose.

COMMITTEE, 1938–1939.

Dr. A. Landsborough Thomson, *Chairman*. Elected 1938.
Dr. G. Carmichael Low, *Vice-Chairman*. Elected 1938.
Hon. Guy Charteris, *Vice-Chairman*. Elected 1938.
Capt. C. H. B. Grant, *Editor*. Elected 1935.
C. R. Stonor, *Hon. Secretary*. Elected 1938.
Major A. G. L. Sladen, *Hon. Treasurer*. Elected 1936.
W. B. Alexander. Elected 1936.
Miss E. P. Leach. Elected 1937.
H. Leybourne Popham. Elected 1937.
P. A. D. Hollom. Elected 1938.

Officers of the British Ornithologists' Club, Past and Present.

Chairmen.

P. L. Sclater, F.R.S.	1892–1913.
Lord Rothschild, F.R.S.	1913–1918.
W. L. Sclater.	1918–1924.
H. F. Witherby.	1924–1927.
Dr. P. R. Lowe.	1927–1930.
Major S. S. Flower.	1930–1932.
D. A. Bannerman.	1932–1935.
G. M. Mathews.	1935–1938.
Dr. A. Landsborough Thomson.	1938–

Vice-Chairmen.

Lord Rothschild, F.R.S.	1930–1931.
W. L. Sclater.	1931–1932.
H. F. Witherby.	1932–1933.
G. M. Mathews.	1933–1934.
N. B. Kinnear.	1934–1935.
H. Whistler.	1935–1936.
D. Seth-Smith.	1936–1937.
Col. R. Sparrow.	1937–1938.
Dr. G. Carmichael Low.	1938–1939.
Hon. Guy Charteris.	1938–1939.

Editors.

R. Bowdler Sharpe.	1892–1904.
W. R. Ogilvie-Grant.	1904–1914.
D. A. Bannerman.	1914–1915.
D. Seth-Smith.	1915–1920.
Dr. P. R. Lowe.	1920–1925.
N. B. Kinnear.	1925–1930.
Dr. G. Carmichael Low.	1930–1935.
Captain C. H. B. Grant.	1935–

Honorary Secretaries and Treasurers.

Howard Saunders.	1892–1899.
W. E. de Winton.	1899–1904.
H. F. Witherby.	1904–1914.
Dr. P. R. Lowe.	1914–1915.
C. G. Talbot-Ponsonby.	1915–1918.
D. A. Bannerman.	1918–1919.
Dr. Philip Gosse.	1919–1920.
J. L. Bonhote.	1920–1922.
C. W. Mackworth-Praed.	1922–1923.
Dr. G. Carmichael Low.	1923–1929.
C. W. Mackworth-Praed.	1929–1935.

Honorary Secretaries.

Dr. A. Landsborough Thomson.	1935–1938.
C. R. Stonor.	1938–

Honorary Treasurers.

C. W. Mackworth-Praed.	1935–1936.
Major A. G. L. Sladen.	1936–

LIST OF MEMBERS.

JUNE 1939.

ACLAND, Miss C. M. ; Walwood, Banstead, Surrey.

ALEXANDER, H. G. ; 144 Oak Tree Lane, Selly Oak, Birmingham.

ALEXANDER, W. B., M.A. (*Committee*) ; Dept. of Zoology, University Museum, Oxford.

AYLMER, Commdr. E. A., R.N. ; Wyke Oliver, Preston, Dorset.

BAKER, E. C. STUART, C.I.E., O.B.E., F.L.S., H.F.A.O.U. ; 6 Harold Road, Upper Norwood, S.E. 19.

BANNERMAN, DAVID A., M.B.E., Sc.D., F.R.S.E. (*Chairman*, 1932–1935) ; British Museum (Natural History), Cromwell Road, S.W. 7 ; and 7 Pembroke Gardens, Kensington, W. 8.

BARCLAY-SMITH, Miss P. ; Park Lodge, Hervey Road, Blackheath, S.E. 3.

BARNES, Mrs. R. G. ; Hungerdown, Seagry, Wilts.

BARRINGTON, FREDERICK J. F., M.S., F.R.C.S. ; University College Hospital Medical School, Gower Street, W.C. 1.

BATES, G. L. ; Blasford Hill, Little Waltham, Chelmsford.

BENSON, C. W. ; c/o Secretariat, Zomba, Nyasaland.

BEST, Miss M. G. S. ; 10 A Cresswell Place, S.W. 10.

BLAKER, GEORGE B. ; Gaveston Place, Nuthurst, Horsham, Sussex.

BOORMAN, S. ; Heath Farm, Send, Woking, Surrey.

BOOTH, H. B. ; Ryhill, Ben Rhydding, Yorks.

BOYD, A. W., M.C. ; Frandley House, near Northwich, Cheshire.

BRADFORD, A. D. ; Garston House, near Watford, Herts.

BROWN, GEORGE ; Combe Manor, Hungerford, Berks.

BUTLER, ARTHUR L. ; St. Leonard's Park, Horsham, Sussex.

BUXTON, ANTHONY ; Horsey Hall, Gt. Yarmouth, Norfolk.

Campbell, Dr. James W. ; Layer Marney Hall, Kelvedon, Essex.

Carter, Miss B. A. ; Firtree Cottage, Chipperfield, King's Langley, Herts.

Cave, Captain F. O. ; Stoner Hill, Petersfield, Hants.

Chapin, Dr. James P. ; Musée du Congo, Tervueren, Belgium ; and American Museum of Natural History, Central Park, New York City, U.S.A.

Chapman, F. M. ; American Museum of Natural History, Central Park, New York City, U.S.A.

Charles, Mrs. Edith S. ; Woodside House, Chenies, Bucks.

Charteris, Hon. G. L. (*Vice-Chairman*) ; 24 Oxford Square, W. 2.

Chasen, Frederick N. ; Raffles Museum, Singapore.

Cheesman, Major R. E., C.B.E. ; Tilsden, Cranbrook, Kent.

Clancey, A. ; 9 Craig Road, Cathcart, Glasgow, S. 4.

Clarke, Brig.-General Goland van Holt, C.M.G., D.S.O. ; Wiston Park, Steyning, Sussex.

Clarke, John P. Stephenson ; Broadhurst Manor, Horsted Keynes, Sussex.

Clarke, Col. Stephenson Robert, C.B. ; Borde Hill, Cuckfield, Sussex.

Cleave, Henry P. O. ; Mansfield House, Kendrick Road, Reading.

Cochrane, Captain Henry L., R.N. (retd.) ; Court Place, West Monkton, Taunton, Somerset.

Conover, H. B. ; 6 Scott Street, Chicago, Illinois, U.S.A.

Cunningham, Josias ; Drinagh, Kensington Road, Knock, Belfast.

Cunynghame, H. D. ; 34 St. James's Street, London, S.W. 1.

Curtis, Frederick, F.R.C.S. ; Alton House, Redhill, Surrey.

Deane, Robert H. ; Anne Boleyn Cottage, Carlton Road, Seaford, Sussex.

Delacour, Jean ; Chateau de Clères, Clères, Seine-Inférieure, France.

Dewhurst, Major F. W., Royal Marine Barracks, Plymouth.

Dobie, William Henry, M.R.C.S. ; 32 St. Martin's Fields, Chester.

Duncan, Arthur Bryce ; Gilchristlands, Closeburn, Dumfriesshire.

Ellis, Ralph, F.L.S. ; 2420 Ridge Road, Berkeley, California, U.S.A.

Ezra, A., O.B.E. ; Foxwarren Park, Cobham, Surrey.

Ferrier, Miss Judith M. ; Blakeney Downs, Blakeney, Norfolk.

Fisher, James ; Zoological Gardens, Regent's Park, N.W. 8.

Fisher, Kenneth ; School House, Oundle, Northamptonshire.

Flower, Major S. S. (*Chairman*, 1930–1932) ; 27 Park Road, Tring, Herts.

Foulkes-Roberts, Captain P. R. ; Westwood, Goring-on-Thames, Oxon.

Gilbert, H. A. ; Bishopstone, near Hereford.

Glegg, W. E. ; 2 Burlington House, King's Road, Richmond, Surrey.

Glenister, A. G. ; The Barn House, East Blatchington, Seaford, Sussex.

Godman, Miss Eva ; South Lodge, Horsham, Sussex.

Grant, Captain C. H. B. (*Editor of the 'Bulletin'*) ; The Cottage, 15 a Emperor's Gate, S.W. 7.

Gyldenstolpe, Count Nils ; Royal (Natural History) Museum, Stockholm, Sweden.

Hachisuka, The Marquess ; Mitashiba, Tokyo, Japan.

Haigh, George Henry Caton ; Grainsby Hall, Great Grimsby, Lincolnshire.

Hale, Rev. James R., M.A. ; Yalding Vicarage, Maidstone, Kent.

Hamerton, Colonel A. E. ; 1 Park Village West, Regent's Park, N.W. 1.

Harrison, Bernard Guy ; 45 St. Martin's Lane, W.C. 2.

Harrison, James M., D.S.C., M.R.C.S., L.R.C.P. ; Bowerwood House, St. Botolph's Road, Sevenoaks, Kent.

Heath, R. E. ; 2 Pembroke Court, Edwardes Square, W. 8.

Hett, Geoffrey Seccombe, M.B., F.R.C.S. ; 86 Brook Street, Grosvenor Square, W. 1.

Hodgkin, Mrs. T. Edward ; Old Ridley, Stocksfield, Northumberland.

Hollom, P. A. D.; Rolverden, Hook Heath, Woking, Surrey.

Hopkinson, Emilius, C.M.G., D.S.O., M.B.; Wynstay, Balcombe, Sussex.

Hutson, Lieut-Col. H. P. W., R.E.; Chatham House, Rome Gardens, Abassia, Cairo, Egypt.

Inglis, C. McFarlane; Natural History Museum, Darjiling, India.

Ingram, Capt. Collingwood; The Grange, Benenden, Cranbrook, Kent.

Jabouille, Pierre; Chateau de Clères, Clères, Seine-Inférieure, France.

Jeffrey, T. C.; Thorpe Grange, Ashbourne, Derbyshire.

Jordan, Dr. Karl; Zoological Museum, Tring, Herts.

Jourdain, Rev. F. C. R., M.A., H.F.A.O.U., H.M.S.O. de France; Whitekirk, 4 Belle Vue Road, Southbourne, Hants.

Joy, Norman H., M.R.C.S., L.R.C.P.; Dungeness, Kent.

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Kuroda, Dr. Nagamichi; Fukuyoshi Cho, Akasaka, Tokyo, Japan.

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Lloyd, Bertram; 53 Parkhill Road, London, N.W. 3.

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Lowe, P. R., O.B.E., M.B., B.C. (*Chairman*, 1927–1930); British Museum (Natural History), Cromwell Road, S.W. 7.

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MACKWORTH-PRAED, C. W. ; 51 Onslow Gardens, S.W. 7.

MACMILLAN, Captain W. E. F. ; 42 Onslow Square, S.W. 7.

MCNEILE, J. H. (*Committee*) ; Nonsuch, Bromham, Chippenham, Wilts.

MACPHERSON, D. W. K. ; P.O., Lilongwe, Nyasaland.

MAGRATH, Lieut.-Colonel H. A. F. ; 19 A Cygnet House, King's Road, S.W. 3.

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MATHEWS, G. M., C.B.E., F.R.S.E., H.F.A.O.U. (*Chairman* 1935–1938) ; Meadway, St. Cross, Winchester, Hants.

MAVROGORDATO, J. G. ; Mariners, Westerham, Kent.

MAY, W. NORMAN, M.D. ; The White House, Sonning, Berks.

MAYAUD, NOËL ; Le Lys, par le Puy-Notre-Dame, Maine-et-Loire, France.

MEIKLEJOHN, Lt.-Col. R. F., D.S.O. ; c/o Lloyds Bank (Sec. F.2), 6 Pall Mall, London, S.W. 1.

MEINERTZHAGEN, Colonel R., D.S.O. ; 17 Kensington Park Gardens, W. 8.

MICHOLLS, Mrs. DOROTHY ; Silver Birches, Wentworth, Virginia Water, Surrey.

MOMIYAMA, TOKU TARO ; 1146 Sasazka, Yoyohata-mati, Tokyo, Japan.

MUNN, P. W. ; Puerto Alcudia, Majorca, Balearic Isles, Spain.

MURTON, Mrs. C. D. ; Cranbrook Lodge, Cranbrook, Kent.

MUSSELWHITE, D. W. ; 59 Mayford Road, Wandsworth Common, S.W. 12.

NAUMBURG, Mrs. W. W. ; 121 East 64th Street, New York City, U.S.A.

NEWMAN, T. H. ; Verulam, 46 Forty Avenue, Wembley Park, Middlesex.

NICHOLSON, E. M. ; 13 Upper Cheyne Row, S.W. 3.

NORRIS, C. A. ; Grassholme, Stratford-on-Avon, Warwickshire.

NORTH, M. E. W. ; c/o Secretariat, Nairobi, Kenya.

OLDHAM, CHAS. ; Oxfield, Berkhamsted, Herts.

Osmaston, Bertram Beresford ; 10 Collingwood Terrace, Westgate-on-Sea, Kent.

Pakenham, R. H. W. ; Kingsley, Hurtis Hill, Crowborough, Sussex, and c/o Secretariat, Zanzibar, Eastern Africa.

115 Paulson, C. W. G. ; 10 King's Bench Walk, Temple, E.C. 4.

Peall, Mrs. Oscar ; Oare, Marlborough, Wilts.

Pease, H. J. R. ; Medmenham, Marlow, Bucks.

Phillips, A. S. ; 56 Acacia Road, N.W. 5.

Pitman, Capt. C. R. S., D.S.O., M.C. ; c/o Grindlay & Co., 54 Parliament Street, S.W. 1.

120 Popham, Hugh Leyborne, M.A. ; Hunstrete House, Pensford, Somerset.

Priestley, Mrs. Mary ; 3 The Grove, Highgate Village, N. 6.

Rhodes, Miss G. M. ; Hildersham Hall, Cambridge.

Rickett, C. B. ; 27 Kendrick Road, Reading, Berks.

Rivière, B. B., F.R.C.S. ; The Old Hall, Woodbastwick, Norfolk.

125 Sandeman, R. G. C. C. ; Dan-y-parc, Crickhowell, Brecon.

Schauensee, R. M. de ; Devon, Pennsylvania, U.S.A.

Schouteden, Dr. H. ; Musée du Congo, Tervueren, Belgium.

Sclater, William Lutley, M.A. (*Chairman*, 1918–1924) ; 10 Sloane Court, S.W. 3.

Seth-Smith, David ; Curator's House, Zoological Gardens, Regent's Park, N.W. 8.

130 Sherriff, Albert ; 8 Ranulf Road, Hampstead, N.W. 2.

Shipton, Wm., M.D. ; 2 The Square, Buxton, Derbyshire.

Simonds, Major Maurice H. ; Fines Baylewick, Binfield, Berks.

Sladen, Major A. G. Lambart, M.C. (*Treasurer*) ; Horsenden Manor, Princes Risborough, Bucks ; and 39 St. James's Street, S.W. 1.

Sparrow, Col. R., C.M.G., D.S.O. (*Vice-Chairman*) ; The Lodge, Colne Engaine, Earls Colne, Essex.

135 Stares, J. W. C. ; Portchester, Hants.

Steuart, Mrs. Ronald ; The Old Rectory, North Fambridge, Chelmsford, Essex.

Stevens, Herbert; Clovelly, Beaconsfield Road, Tring, Herts.

Stevens, Noël; Walcot Hall, Lydbury North, Salop.

Stonor, C. R. (*Hon. Secretary*); British Museum (Natural History), Cromwell Road, S.W. 7.

140 Taka-Tsukasa, Prince Nobusuke; 1732 Sanchome, Kami-meguro, Meguro-Ku, Tokyo, Japan.

Tavistock, The Most Hon. the Marquess of; Barrington House, Hayward's Heath, Sussex.

Taylor, Miss D. L.; Bellefields, Englefield Green, Surrey.

Thomson, A. Landsborough, C.B., O.B.E., D.Sc., F.R.S.E. (*Chairman*); 16 Tregunter Road, S.W. 10.

Ticehurst, Claud B., M.A., M.R.C.S.; Saxon House, Appledore, Kent.

145 Ticehurst, N. F., O.B.E., M.B., F.R.C.S.; 24 Pevensey Road, St. Leonards-on-Sea, Sussex.

Tucker, B. W., B.A.; 9 Marston Ferry Road, Oxford.

Turner, Miss E. L.; The Half Way Cottage, 13 Storey's Way, Cambridge.

Turtle, Lancelot J.; 17–21 Castle Place, Belfast.

Urquhart, Capt. Alastair, D.S.O.; Latimer Cottage, Latimer, Chesham, Bucks.

150 van Someren, Dr. V. G. L.; East Africa and Uganda Natural History Society, Coryndon Memorial Museum, Nairobi, Kenya Colony, East Africa.

Vernay, A. S.; 51 Berkeley Square, W. 1.

Vincent, J.; "Firle," Mooi River, Natal, South Africa.

Wade, Major G. A., M.C.; St. Quintin, Sandy Lane, Newcastle-under-Lyme, Staffs.

Wait, W. E., C.M.G., C.F.A.O.U.; Applegarth, Aldbury, near Tring, Herts.

155 Waite, Herbert William; c/o Messrs. Grindlay & Co., Ltd., Bombay, India.

Wallis, H. M.; 110 Kendrick Road, Reading, Berks.

Ware, R.; Leafwood, Frant, Tunbridge Wells, Kent.

Watt, Mrs. H. W. Boyd; 90 Parliament Hill Mansions, Lissenden Gardens, N.W. 5.

Whistler, Hugh, F.L.S.; Caldbec House, Battle, Sussex.

WHITE, CHARLES M. N.; Park-View, Garstang Road, Broughton, near Preston, Lancs.

WHITE, S. J.; 17 Philpot Lane, E.C. 3.

WHITLEY, H.; Primley, Paignton, S. Devon.

WILLOUGHBY-ELLIS, H.; Friary Hill, Weybridge, Surrey.

WISHART, E. E.; Marsh Farm, Binsted, Arundel, Sussex.

WITHERBY, HARRY F., M.B.E. (*Chairman*, 1924–1927); Gracious Pond Farm, Chobham, near Woking, Surrey.

WITHERINTON, G.; Sumner Plat, Hayward's Heath, Sussex.

WOOD, CASEY A., M.D.; c/o The Library of Ornithology, McGill University, Montreal, Canada.

WORKMAN, WILLIAM HUGHES; Lismore, Windsor Avenue, Belfast.

WORMS, CHARLES DE; Milton Park, Egham, Surrey.

Total number of Members 169

NOTICE.

[Members are specially requested to keep the Hon. Secretary informed of any changes in their addresses, and those residing abroad should give early notification of coming home on leave.]

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22 NOV 1938
PURCHASED

BULLETIN

OF THE

BRITISH ORNITHOLOGISTS' CLUB.

No. CCCCXVI.

Special General Meeting.

Chairman : Captain C. H. B. Grant.

A Special General Meeting was held at the Rembrandt Hotel, Thurloe Place, S.W. 7, at 6.15 p.m. on Wednesday, October 12, 1938, in accordance with a notice which had been circulated.

An amendment of the Rules was proposed by the Committee and approved, as follows :—In Rule I, delete the words "a Vice-Chairman" and substitute the words "two Vice-Chairmen."

Annual General Meeting.

Chairman : Captain C. H. B. Grant.

This was held immediately after the Special General Meeting. The minutes of the Special General Meeting and Annual General Meeting held on October 13, 1937, were confirmed.

Dr. A. Landsborough Thomson then submitted his Report as Secretary. He said that the number of members remained approximately the same. One member had died, Mr. C. F. M.

Swynnerton. Four members had resigned, and four new members had joined the Club. The usual meetings had been held: the total attendances were 500 (341 members, 159 others), which was 48 less than in the previous year. The Report was approved.

Major A. G. Lambart Sladen submitted his Report as Treasurer. The Financial Statement was presented, as printed herewith. The Report was approved.

Dr. A. Landsborough Thomson was elected Chairman in place of Mr. G. M. Mathews, whose period of office terminated.

Dr. G. Carmichael Low was elected Vice-Chairman in place of Colonel R. Sparrow, whose period of office terminated; and the Hon. G. L. Charteris was elected Vice-Chairman in the new place created by the amendment of the Rules.

Mr. C. R. Stonor was elected Hon. Secretary in place of Dr. A. Landsborough Thomson.

Major A. G. L. Sladen was re-elected Hon. Treasurer.

Mr. P. A. D. Hollom was elected a member of the Committee in place of Mr. J. H. McNeile, retiring by seniority.

Committee, 1938–39.

Dr. A. Landsborough Thomson, *Chairman* (elected 1938).
Dr. G. Carmichael Low, *Vice-Chairman* (elected 1938).
The Hon. G. L. Charteris, *Vice-Chairman* (elected 1938).
Captain Claude H. B. Grant, *Editor* (elected 1935).
Mr. C. R. Stonor, *Hon. Secretary* (elected 1938).
Major A. G. Lambart Sladen, *Hon. Treasurer* (elected 1936).
Mr. W. B. Alexander (elected 1936).
Miss E. P. Leach (elected 1937).
Mr. H. Leybourne Popham (elected 1937).
Mr. P. A. D. Hollom (elected 1938).

Financial Statement for the 12 *months September* 1, 1937, *to August* 31, 1938.

12 m'ths ended Aug. 31, 1937. £ s. d.		£ s. d.	£ s. d.
	To Balance in Hand, September 1, 1937 :—		
62 3 5	Cash at Bank, Current a/c .	90 7 1	
253 3 3	Do. Deposit a/c .	254 8 5	
	500 National Savings Certificates at cost, held by		
400 0 0	Bank	400 0 0	
2 0 4	Cash in Hands of Treasurer.	16 3	
			745 11 9
10 0 0	,, Entrance Fees of 4 New Subscribers	4 0 0	
180 12 0	,, Subscriptions of 165 Members.	173 5 0	
1 1 0	,, Subscriptions in Advance ...	1 1 0	
1 1 0	,, Subscriptions in arrear.....	....	
	,, Entrance Fees in advance ..	1 0 0	
			179 6 0
38 1 7	,, Sales of 'Bulletin'		62 7 9
1 5 2	,, Bank Interest		1 4 11
£949 7 9			£988 10 5

12 m'ths ended Aug. 31, 1937. £ s. d.		£ s. d.	£ s. d.
	By Printing and Distribution of Publications and 'Bulletin'		
131 12 0	407/9		134 4 6
16 5 0	,, Hire of Lanterns at Meetings.		13 4 8
	,, H. B. Usher for compiling and arranging Index of 'Bulletin' B. O. C., 1937/38		5 5 11
5 5 7	,, Miscellaneous Expenditure, including Audit Fee, Printing,		
22 5 11	Stationery, and Postages ..		20 4 8
	,, Royal Geographical Society— Hire of Hall		9 4 6
8 7 6	,, David Lack. Grant towards cost of visit to Galapagos		
20 0 0	Islands		....
	,, Miss D. T. Raikes, Payment *re* the protection of the Kite in Wales		10 0 0
	,, Balance in Hand, August 31, 1938 :—		
90 7 1	Cash at Bank, Current a/c .	139 0 10	
254 8 5	Do. Deposit a/c .	255 13 4	
	500 National Savings Certificates at cost, held by		
400 0 0	Bank	400 0 0	
16 3	Cash in Hands of Treasurer...	1 12 0	
			796 6 2
£949 7 9			£988 10 5

A. G. LAMBART SLADEN, *Hon. Treasurer.*

We have examined the foregoing Account with the Books and Vouchers of the British Ornithologists' Club for the year ended August 31, 1938, and certify it to be in accordance therewith. We have also verified the Cash at Bank and the holding of National Savings Certificates.

23 Queen Victoria Street,
London, E.C. 4.
October 1, 1938.

W. B. KEEN & CO.,
Chartered Accountants.

Ordinary Meeting.

The four-hundred-and-eleventh Ordinary Meeting was also held at the Rembrandt Hotel on Wednesday, October 12, 1938.

Chairman : Dr. A. Landsborough Thomson.

Members present :—Miss C. M. Acland ; W. B. Alexander ; Dr. D. A. Bannerman ; Miss P. Barclay-Smith ; F. J. F. Barrington ; Miss M. G. S. Best ; Brig.-Gen. R. M. Betham ; G. Brown ; Miss B. A. Carter ; Mrs. E. S. Charles ; Hon. G. L. Charteris (*Vice-Chairman*) ; F. N. Chasen ; Brig.-Gen. Goland V. Clarke ; H. P. O. Cleave ; A. Ezra ; Miss J. M. Ferrier ; J. Fisher ; Capt. C. H. B. Grant (*Editor*) ; Col. A. E. Hamerton ; B. Guy Harrison ; R. E. Heath ; Mrs. T. E. Hodgkin ; P. A. D. Hollom ; Dr. E. Hopkinson ; Dr. K. Jordan ; Rev. F. C. R. Jourdain ; N. B. Kinnear ; Miss E. P. Leach ; Miss C. Longfield ; Dr. G. Carmichael Low (*Vice-Chairman*) ; Dr. P. R. Lowe ; C. W. Mackworth-Praed ; J. H. McNeile ; Lieut.-Col. H. A. F. Magrath ; Dr. P. H. Manson-Bahr ; J. G. Mavrogordato ; Dr. W. N. May ; Lieut.-Col. R. F. Meiklejohn ; C. Oldham ; B. B. Osmaston ; H. J. R. Pease ; A. S. Phillips ; H. Leyborne Popham ; Mrs. J. B. Priestley ; Miss G. M. Rhodes ; W. L. Sclater ; D. Seth-Smith ; Miss D. L. Taylor ; B. W. Tucker ; Miss E. L. Turner ; Mrs. H. W. Boyd Watt ; H. Whistler ; H. F. Witherby ; C. G. de Worms.

B. O. U. Members present :—Mrs. Meiklejohn ; Lieut.-Col. W. A. Payn.

Guests of the Club :—Dr. K. Morris ; Mrs. Webb.

Guests :—Mrs. D. A. Bannerman ; Miss E. Barry ; Mrs. Betham ; A. B. Brooks ; Mrs. T. Charles ; Mrs. Chasen ; Dr. C. E. Hellmayr ; Mrs. Hill ; R. Johnson ; Mrs. Jordan; Miss Lynes ; Mrs. Mackworth-Praed ; G. N. May ; Mr. and Mrs. Baird Murray ; L. Parmenter ; W. H. Perrett ; Mrs. A. S. Phillips ; Mrs. Sclater ; Dr. Malcolm

Smith ; Mrs. A. L. Thomson ; Miss W. Wilkinson ; J. G. Williams ; W. H. Williams ; Mrs. Witherby ; T. F. Witherby.

B. O. C. members, 55 ; B. O. U. members, 2 ; guests of the Club, 2 ; guests, 26.

Presentation of Godman-Salvin Medal.

After dinner, before the business of the Ordinary Meeting was begun, the President of the British Ornithologists' Union, Dr. P. R. Lowe, presented the Godman-Salvin Medal to Mr. H. F. Witherby, in recognition of his distinguished ornithological work.

Exhibition of a Black Kite.

Mr. N. B. Kinnear exhibited a mounted specimen of a Black Kite. The full particulars of this specimen will be published in ' British Birds.'

Colour-film of the Aviaries at the Chateau de Clères.

Miss Cynthia Longfield showed a very beautiful colour-film of the Chateau, the grounds, and the birds, especially the Flamingoes and other water birds. This film was taken during the International Ornithological Congress at Rouen, and reminded many of us of our visit there last May.

Film of bird-life on Lake Balaton, Hungary, and wild life in the Sudeten Mountains.

Dr. Kenneth Morris's films, partly in colour, of Glossy Ibis, Spoonbill, Egret, and Night Heron, showed the birds at the nest, with young or eggs, and in flight ; this most excellent series was followed by a film showing Roedeer amidst the grand scenery of the Sudeten Mountains.

A new name for the Pink-footed Puff-back of Cameroon Mountain.

Dr. David A. Bannerman sent the following note concerning the Pink-footed Puff-back from Cameroon Mountain, for which a new name must be substituted :—

In the Bulletin of the B. O. C. vol. xxxv. 1915, p. 105, I described a new race of *Dryoscopus* from Cameroon Mountain

which I named *Dryoscopus angolensis cameroonensis*. At that time I overlooked the fact that in ' Vögel Afrikas,' ii. 1903, p. 592, Reichenow had used this name (though spelling it differently in the German fashion) *camerunensis* for a race of *Dryoscopus senegalensis*, a name which has now been relegated to the synonymy of *D. senegalensis*.

Nevertheless, it seems to me that *D. camerunensis* Reichw. invalidates the use of the name for any other race of *Dryoscopus*, and I therefore propose :—**Dryoscopus angolensis boydi** for *Dryoscopus angolensis cameroonensis* Bannerman, not *Dryoscopus senegalensis camerunensis* Reichenow. Named in honour of Boyd Alexander, who secured the still unique type in the British Museum.

A new Genus of Shrikes.

Dr. David A. Bannerman proposed a new genus for Bocage's Shrike which he characterized as follows :—

Dryophoneus, gen. nov.

Type : *Laniarius bocagei* Reichenow.

Bill compressed with arched culmen and moderately stout, upper mandible slightly decurved and sharply hooked at the tip ; nostrils exposed and linear shaped. Rictal bristles fine and short but prominent. Wing short and rather rounded, not reaching to the tip of the upper tail-coverts. First outer remex long, extending two-thirds the length of the second. Tail very slightly rounded, composed of twelve feathers and of normal length. Upper tail-coverts long, reaching nearly half the length of the tail. Foot and tarsus moderately strong, the latter composed of four scutes in front, smooth behind. Claws short, sharply curved and very sharp. Colour pattern distinctive. Black crown and cheeks, slate-grey back and wings, buff and white underparts. A distinctive white eye-stripe and frontal band. Sexes almost exactly alike, thus differing from all species of *Dryoscopus*. Feathers of rump soft and ample but not so markedly so as in *Dryoscopus* or *Chaunonotus*, but more so than in *Chlorophoneus* ; in the

two first named genera the sexes are strikingly different. No concealed white spots on the rump. Young are distinctively barred both above and below, a very important point of distinction.

This Shrike was originally placed by Dr. Reichenow in the genus *Laniarius*, who later, in his ' Vögel Afrikas ' transferred it to *Dryoscopus*. In the ' Systema Avium Æthiopicarum ' it is placed by Sclater in *Dryoscopus* and also in Shelley's ' Birds of Africa.' Dr. Chapin. on the other hand, declares that it cannot be placed in *Dryoscopus* and transfers it to *Chlorophoneus*, in which he is followed by Bates. The fact is that in one particular character or another it differs from every described genus, and though, much as I dislike making new genera, I have made up my mind that this is a proper case for the creation of a new genus, the diverse opinions already expressed by such authorities on African birds as Sclater, Chapin, and Bates encourages me to take this course.

A new race of Grey-wing Francolin from Kenya Colony.

Dr. VAN SOMEREN sent the following description of a new race of Grey-Wing Francolin :—

Francolinus africanus macarthuri, subsp. nov.

Description.—Geographically nearest to *F. a. uluensis* O. Grant, but differs from this race in being darker and colder in general colour; the dark areas of the upper parts being blacker, less blackish brown ; the chestnut of the breast and flanks being rather darker ; the wing-coverts being greyer ; and the primaries being more sooty in tone.

Type.—Adult male : Chyulu Camp, Chyulu Hills, 6500 ft., April 19, 1938. Coryndon Museum Expedition, 1938.

Distribution.—Chyulu Range, Masai-Ukamba District boundary, south-east Kenya Colony.

Measurements of type.—Wing 173 mm.

Remarks.—Eleven specimens of this dark race were collected on the Range at altitudes of 5500 to 7000 ft. The wings measure : males, 164–165 ; females, 155–160 mm. It represents a dark alpine race.

A new race of Grass-Warbler.

Major F. O. Cave sent the following description of a new race of Grass-Warbler :—

Cisticola ayresii *imatong*, subsp. nov.

1. Type, a breeding male in Summer dress, in the British Museum, reg. no. 1938.8.5.1, collected by Capt. F. O. Cave, 29 April 1938, at 8000 ft. in the Imatong Mts., Equatorial Province of the Anglo-Egyptian Sudan, *ca.* Lat. 4° N., Long 33° E. Wing 52, tail 28.

   Co-type, a breeding female in Summer dress, collected two days later at the same place ; wing 48, tail 29 ; also in British Museum, reg. no. 1938.8.5.2.

2. **description** of the race from a series of ten breeding males and females and five juveniles (May 1937, 8), and fifteen males and females in Winter dress or in pre-nuptial moult (Feb.) and post-nuptial moult (May).

   General. The largest (least small) and most northerly ranging race yet known. Like its nearest neighbour, C. ayresii *mauensis* of the Kenya highlands, inhabiting a highland massif. These two races separated by about two hundred miles of intervening country whose birds and environmental qualities are sufficiently well known to expect it being uninhabited by—unsuitable for—the species.

   Size. Rather larger than any other ayresii, quite noticeably so in the museum without a ruler, by the bill alone.

   Ad. ♂. Wing 52±1 : tail S.. 27±1, W. 33±1.

   Ad. ♀. Wing 48–49 ; tail S. 30±2, W. 29±2.

   Range. Resident in the upper-zone of the Imatong Mountains, which, with other similar ranges forms one of the two large, isolated and high (*ca.* 10,000 ft.) massifs of the Anglo-Egyptian Sudan, and extends across both sides of the Sudan-Uganda marches. Large expanses of mountain-grass, interspersed with tracts and groves of low "forest" are found in its upper zone.

C. AYRESII lives in the former and, as yet, no other Cisticola SPECIES has been found up there. Admiral Lynes, to whom I am indebted for the verification of this race, tells me that the other high Sudan massif, Jebel Marra, is still more isolated, and its upper-zone is quite different, both in environment and bird-kind, to that of the Imatong.

COLORATION. *Adults Summer.* Cf. *C. mauensis.* ABOVE, very like, but the rusty-buff of the feather-borders and rump of rather deeper shade: BELOW, the rusty-buff suffusions very much deeper and more widespread, only the chin and throat white.

Adults Winter. Cf. *C. ayresii* and *C. mauensis* not having a Winter (or eclipse) dress. ABOVE, the rusty-buff conspicuously darker, less bright: BELOW, the rusty-buff suffusions very much deeper and more widespread, even a little more so than in the Summer dress.

Juveniles. Like the other races in being well sulphured below, but the yellowness, except on chin and throat, very much deepened by its mixture with rusty-buff, as strong as in the adult dress.

MODE OF DRESS. The season, regular and perfect, apparently without exception.

BEHAVIOUR. Identical in all its essential characters with that of its SPECIES elsewhere.

SEASONS. March, pre-nuptial moult and begin breeding; April–May mid-breeding; June–July end of breeding, care of young and post-nuptial moult; remainder of year, off-season.

These are different from those of other SPECIES of Cisticola inhabiting the Upper Nile Valley and plateau from which the Agoro massif rises.

A new name for a genus of Storm Petrel.

Mr. Gregory M. Mathews, sent the following note on the name of a genus of Storm Petrel which is pre-occupied, and for which he proposes :

Fregandria for *Fregolla*, Mathews, Emu, vol. xxxvii. p. 142, Oct. 1st, 1937, not *Fregella* Walker, List Lep. Brit. Mus. vol. i. p. 272, 1854.

Notes on some Mexican and Central American Wrens of the Genera Heleodytes, Troglodytes, and Nannorchilus; and four new races.

Mr. A. J. van Rossem sent the following notes :—

In the course of his investigations of the Mexican birds in the collections at the British Museum the writer has been able to reach some conclusions in regard to certain species and subspecies of Troglodytidæ. These are given below in the hope that they may prove to be of value to systematic ornithologists who have not had access to the British Museum series. Although the present paper was originally written on the basis of the British Museum material it has been redrafted and, in places, slightly modified through subsequent examination of the series in the collections of the Bureau of Biological Survey and the United States National Museum. My thanks are due to the authorities of all these institutions for many courtesies extended.

Heleodytes chiapensis (Salvin and Godman).

The describers of *Campylorhynchus chiapensis* were perfectly correct in comparing their unique type with the South American *C. griseus* and *C. bicolor* and in stating that no comparison with *C. capistratus* was necessary. When this type was examined by the writer in 1933 at the British Museum some notes were made, and subsequently a note was published ('Birds of El Salvador,' 1938, p. 431) to the effect that Hellmayr's assignment of the name to the common Cactus Wren (*Heleodytes rufinucha nigricaudatus* Nelson) of the region was quite unjustified. A re-examination of the type in the summer of 1938 confirms my former statements on the subject. While obviously a member of the *H. griseus-H. minor-H. bicolor* group

it seems to be specifically distinct. I have nothing to add to the accurate and concise description by Salvin and Godman and very few additional data. The unique type is an adult in abraded plumage, sexed as a female by the collector W. B. Richardson, and taken at Tonola, Chiapas, on June 1, 1890. My measurements are as follows : wing, 85 ; tail, 74 ; exposed culmen, 26·1 ; tarsus, 29·0 ; middle toe minus claw, 19·0 mm.

Considering the amount of collecting which has been carried on in Chiapas in the nearly fifty years since the type was taken it seems remarkable that further specimens have not been discovered.

Heleodytes jocosus (Sclater).
Heleodytes gularis (Sclater)

These two Cactus Wrens have, of late years, usually been regarded as conspecific, for the differences in adults are for the most part matters of degree, and the ranges are complementary. However, the juveniles completely refute such treatment. Those of *H. jocosus* are spotted below and have a broken, " herring-bone " pattern above, while those of *H. gularis* are immaculate below and heavily marked with broad, black, longitudinal stripes above. It is a curious circumstance that the juveniles are so distinct as to indicate radically different origins, while the adults are so similar as to make close discrimination necessary in individual cases. There is really no excuse for the action of recent writers (the present one included) in reducing *H. gularis* to the status of a race of *H. jocosus*, for Ridgway (' Birds of North and Middle America,' iii. 1904, pp. 525–526) described accurately the juveniles of both and, properly, treated them as distinct species.

Incidentally, the British Museum material indicates that *H. occidentalis* Nelson of southern Jalisco and *H. narinosus* Phillips are good races, but the matter must be investigated further on the basis of juveniles.

Troglodytes brunneicollis Sclater.

In the British Museum is a series of 79 specimens of the Brown-throated Wren, certainly not the largest known series,

but from the standpoint of selection to represent almost every section of Mexico where the species occurs it is certainly without equal, and is just one of countless examples of the care and judgement shown by Salvin and Godman in the assembling of their Mexican collections. Perhaps most important of all is a series of six specimens of typical *T. brunneicollis* (including the type) from Oaxaca, without which as a starting point it would not have been possible to apply names to any of the several southern races with any degree of confidence.

The present paper is not intended as a general review of the species, for the very good reason that there is probably not sufficient material in the combined collections of the world to attempt such an undertaking with any degree of finality. Below are described several obvious races which have been uncovered during the present investigations. As before noted, the British Museum data have been checked with the Biological Survey and United States National Museum series, in this case 66 specimens.

Troglodytes brunneicollis guerrerensis, subsp. nov.

Description.—Most heavily barred dorsally and laterally of the races of *Troglodytes brunneicollis*. Compared with typical *T. b. brunneicollis* Sclater of the mountains of Oaxaca, general coloration duller, paler, and more greyish-brown dorsally; reddish-brown of anterior underparts slightly paler; flanks and underparts more heavily barred. Compared with *T. b. culequita* of south central Mexico (see *postea*), upper parts and flanks much more heavily barred and abdominal region darker and more reddish (less white).

Distribution.—The Sierra Madre del Sur of Guerrero.

Type.—In the British Museum. Adult, sex not indicated. Omilteme, Guerrero, Mexico, altitude 8000 feet, July 1888; collected by Mrs. H. H. Smith. British Museum Register no. 90.12.20.574.

Remarks.—There are fourteen specimens of *T. b. guerrerensis*, six of which are adults and eight are juveniles. The comparative characters are shown by both ages. In addition there are two specimens in the collection of the Bureau of

Biological Survey from Omilteme and the mountains near Chilpancingo.

As may be inferred from the above comparative description, typical *T. brunneicollis* is a comparatively dark, richly coloured race, in fact is the reddish extreme of the species. This fact has been overlooked in America, due, principally, to the extreme rarity of topotypical material. It was undoubtedly this circumstance which led Dr. Nelson to name *Troglodytes brunneicollis nitidus* from Mount Zempoaltepec in north-eastern Oaxaca. I have examined the type and type-series of this supposed race and cannot distinguish it from *T. brunneicollis*. It is to *T. brunneicollis* also that I assign, tentatively, nine specimens from Cofre de Perote and Crizaba in the State of Vera Cruz.

Troglodytes brunneicollis culequita, subsp. nov.

Description.—Compared with *Troglodytes brunneicollis brunneicollis* of the mountains of Oaxaca and southern Vera Cruz, dorsal coloration greyer and less reddish-brown ; coloration below distinctly paler and more pinkish (less reddish) ; flanks less heavily barred and abdominal area very much whiter. Compared with *Troglodytes brunneicollis compositus* Griscom of Tamaulipas, Coahuila, and San Luis Potosi, coloration in general darker and redder, underparts more heavily barred, and whitish abdominal area in more decided contrast with the chest and throat.

Distribution.—Mountains of the southern part of the Mexican Plateua in the States of Hidalgo, (southern) Zacatecas, Mexico, Tlaxcala, Puebla, and Morelos.

Type.—In the British Museum. Adult, sex not indicated. Coajimalpa (Tacubaya), Mexico, D.F., March 7, 1888 ; collected by F. Ferrari-Perez. Brit. Mus. Reg. no. 90.12. 20.548.

Remarks.—This is the race which has been passed as typical *T. brunneicollis* by Dr. Nelson and all subsequent authors. It is really an intermediate between that form and the north-eastern *T. b. compositus*, but occupies such an extensive range and is so abruptly set off from *T. brunneicollis* to the south and

east that it should be recognized by name. Twenty-five specimens from the above states have been examined. In addition there are six from Real del Monte, Hidalgo, which are very dark and brown both above and below, and which I cannot place at this time.

Troglodytes brunneicollis colimæ, subsp. nov.

Description.—Abruptly the darkest of the relatively grey-toned northern and north-western series. Compared with *Troglodytes brunneicollis cahooni* Brewster of Sonora and Chihuahua, coloration *very much* darker and slightly browner throughout. Compared with *T. b. culequita* of the southern central highlands and *T. b. guerrerensis* of the Sierra Madre del Sur of Guerrero, coloration slightly darker and very much greyer; also much less heavily barred both above and below.

Distribution.—Extreme southern Jalisco in the Sierra Nevada de Colima south to Michoacan (Patzcuaro).

Type.—In the British Museum. Male adult. Sierra Nevada de Colima, southern Jalisco, Mexico, altitude 12,000 feet, December 5, 1889; collected by W. B. Richardson. Brit. Mus. Reg. no. 90.12.20.568.

Remarks.—Six specimens from the type-locality have been examined, five taken by Richardson in December 1889 and one by Lloyd and Richardson in April 1889. Altitudes on the labels range from 8000 to 14,000 feet. In the collection of the Bureau of Biological Survey are three fully-grown juveniles from Patzcuaro, Michoacan, which I am at a loss to identify save on the basis that they belong to *T. b. colimæ*, since they show the same comparative differences when studied in connection with juveniles of other races.

The status of the Brown-throated Wrens from the mountains of northern Jalisco, Nayarit, western Zacatecas, and southern Durango is that of intermediates between *T. b. colimæ* and *T. b. cahooni*. The British Museum series shows uniformity of characters over this range, and consequently a race was named in manuscript and a type designated and labelled as such. However, American material shows no

such uniformity, and I therefore do not care to give a separate name to these variable intermediates. They are here considered as nearest to *T. b. cahooni*.

NANNORCHILUS LEUCOGASTER.

Austin (Bull. Mus. Comp. Zool. 69, 1929, p. 384) has commented on the characters of a single specimen from Mountain Cow, British Honduras. The three British Honduras specimens in the British Museum confirm his suspicion that his bird represented a distinct race, the most southern of the subspecies of the White-bellied Wren. This is described as

Nannorchilus leucogaster australis, subsp. nov.

Description.—Dorsal coloration like that of *Nannorchilus leucogaster leucogaster* (Gould) of Tamaulipas and Vera Cruz, but tail more broadly and more regularly barred ; underparts similar to *N. l. leucogaster* but flanks paler and very much greyer, and under tail-coverts strongly barred with blackish-brown on a pale grey ground. Measurements of the type are : wing 48 ; tail 31 ; exposed culmen 14 ; tarsus 18 ; middle toe minus claw 12 mm.

Distribution.—British Honduras (Cayo ; Orange Walk ; Mountain Cow).

Type.—In the British Museum. Adult, sex not indicated. Orange Walk, Belize, British Honduras, December 1887 ; collected by George F. Gaumer. Brit. Mus. Reg. no. 90.12. 20.681.

Remarks.—Hellmayr (Catl. Birds Amer. 7, 1934, p. 272) suggests that *Nannorchilus leucogaster musicus* (Nelson) might well be a synonym of *Cyphorinus pusillus* Sclater. Fortunately the matter is easily disposed of, for one of Sclater's co-types (marked as the type) is in the British Museum, where it bears the number 86.9.15.208. It is clearly synonymous with *N. leucogaster*, the type of which (Brit. Mus. Reg. no. 55.12.19.119) is also in the British Museum. Incidentally, the present series confirms the validity of *Nannorchilus leucogaster grisescens* Griscom of San Luis Potosi, with characters substantially as given by the original describer.

Type-locality of the Eastern Griffon-Vulture.

The Marquess Hachisuka sent the following note :—

In the April (1938) issue of the Bulletin, on page 94, Colonel Meinertzhagen separated the eastern Palæarctic Griffon Vulture from the typical western bird on account of its large size, and named it after his late brother Daniel, as *Ægypius monachus danieli*.

With specimens preserved in Japan I am able to prove that the eastern birds are larger. The author proposed the new name because the type-locality of *Vultur chincou* Daudin, Traite d'Orn. ii. 1800, p. 12, ex Levaillant, Ois. d'Afr. taf. 12, is indeterminable. However, the description is clear to determine its origin. Levaillant wrote about *Le Chincou* in 'Histoire Naturelle des Oiseaux d'Afrique,' tome premier, between pages 53 to 56, which may be translated as follows :—

" We are acquainted with this big and rare vulture through the kindness of a citizen of Ameshof, well known for his ornithological interests and magnificent menagerie which he possesses in his country home near Amsterdam. This enthusiast made it possible for me to make a sketch and description of this bird. I offer my sincere thanks to him for drawing my attention to this rarest and most curious object in his menagerie, which appears to be worthy of a big nation. Not having been able to learn the name given to this bird in its native country, which is China, according to the citizen of Ameshof, I gave it the name *Chincou*, waiting to know by what name the Chinese called it, and to adopt it if it proves to be a better name than the one I have already given." Meinertzhagen further remarks that " it is the most unlikely source for such a large bird in the 18th century, as it only occurs in parts of China which were most inaccessible in those days." However, it is quite clear from the above description that the captive specimen was originally shipped from China to Holland. We know very well that the Chinese, especially the Manchus, were and are the foremost aviculturists, especially of large sized birds of prey, whether

suitable for falconry or not, and it is a wonder to foreign ornithologists when they visit the bird markets in Peking; but it must have been still more wonderful in ancient days, not forgetting Père David's deer, a most remarkable genus of deer, which was only known from the Imperial menagerie in Peking, and its native habitat is still unknown. The Eastern Griffon-Vulture is generally distributed in the mountainous regions of the Mongolian desert, and the breeding records are by no means rare from south-western Manchuria. P. G. Seys records in 1933 that Griffon Vultures are resident in the neighbourhood of Linn Si, which is only about 200 miles north of Peking. About a dozen birds have been taken from Korea and Japan in recent years.

I suggest that the type-locality of *Vultur Chincou*=*Ægypius monachus chincou* (Daudin) should be restricted to north-eastern China of former days, which includes Manchukuo, and *A. m. danieli* becomes a synonym.

Remarks on Charadrius hiaticula major.

Dr. James M. Harrison sent the following note :—

The validity of the British race of the Ringed Plover is questioned in a note by Dr. Carmichael Low (Bull. B. O. C. vol. liv. pp. 126–127). Further views on the question are to be fouund in Hartert, Vögel Paläarkt. Fauna (Erganzungsband, pp. 465–466) and Salomonsen (Zoology of the Faeroes, Aves, lxiv. pp. 70–71). That this excellent race had hitherto been rejected would appear to be due to the fact that a sufficiency of breeding birds was not available. With this end in view I have recently been able to examine a series of Scottish breeding birds in conjunction with breeding specimens from Scandinavia (S. Denmark, Sweden), Siberia, Greenland, and Iceland. Placed in such a series the greyer backs of the British birds are at once apparent. It is possible to grade the material in so far as the Scandinavian, Siberian, and British birds are concerned in diminishing intensity, those from Siberia, *Charadrius hiaticula tundræ* Lowe, being the brownest and darkest, the colour being of a warm brown, then the Scandinavian birds, still brown but of a paler and

colder tone, and, finally, the British birds, by comparison quite pale and definitely washed with a greyish hue. The small series available from Greenland and Iceland do not appear quite uniform and present rather more individual variation, while matching most nearly the Scandinavian group. Some of the Icelandic specimens are almost as dark and brown as those from Siberia. The measurements (in millimetres) obtained are as under; these, it will be observed, overlap to some extent, except in the case of *C. h. tundræ*, though the British specimens are mostly longer winged :—

	Wing.	Beak (from base of skull).	Tarsus.	Tail.
British :—				
♂♂	137–138	20–21	25·5–27·5	67–69
♀♀	134–139	19–21	25·5–26	68–69
Swedish :—				
♂♂	128–129	19	24–25	68–69
♀♀	123–134	20–21	24–26	60–61
Danish :—				
♂♂	129·5–136	18–21	26–27	62–65
Greenland :—				
♂♂	130–134	20	25	64·5–68
♀♀	135–137	19–20	25–26	65–69
Iceland :—				
♂♂	130	20–21	23–26	60–63
♀♀	127–132	20	24–24·5	64
Siberian :—				
♂♂	124·5–132·5	16–19	23–26	60–63
♀♀	126–130	18	24–25	60–64

My grateful thanks for the loan of material are due to the following :—

Swedish : Count Nils Gyldenstolpe, Royal Museum, Natural History, Stockholm.

Danish : Dr. R. Hørring, Zoological Museum of the University, Copenhagen.

Siberian : Dr. Serebrowsky, Zoological Museum of the Academy of Science, Leningrad.

British : Philip A. Clancey Esq., Glasgow.

Notes on Eastern African Birds.

Capt. C. H. B. Grant and Mr. C. W. Mackworth-Praed sent the following two notes :—

(1) On the Status of *Pternistis afer tornowi* Meise, Orn. Monatsb. 1933, p. 142 : Mkiri, Songea District, Tanganyika Territory.

In the Bull. B. O. C. lv. 1935, p. 89, we discussed this race and expressed the opinion that it must become a synonym of *Pternistis afer melanogaster* Neumann.

The British Museum has recently received from Mr. C. W. Benson two male specimens from Vipya Plateau (5600 feet), Nyasaland, which bear out exactly the characters given by Meise and which we saw on some of the fourteen specimens so kindly loaned to us in 1935, *i. e.*, the fine cross barring on the chest and flank feathers and an admixture of chestnut in the otherwise black belly patch, and having the black moustachial stripe of *P. a. melanogaster*.

We are now satisfied that *P. a. tornowi* can be recognized, having a distribution from the Songea District of Tanganyika Territory to the Vipya Plateau in northern Nyasaland, and no doubt having a connection between these two places round the north end of Lake Nyasa.

The occurrence of this Francolin on the Vipya Plateau is of special interest, as it not only supports and extends the distribution of Meise's race, but very clearly shows that the *Pternistis afer* and *Pternistis cranchii* groups cannot be united, both occurring in the northern areas of Nyasaland.

(2) On the Status of the Eastern African races of *Streptopelia vinacea* (Gmelin).

In this group we find very considerable individual variation, and birds can be matched with one another from any part of their range. Both lighter and darker forms occur in the same area in western and eastern Africa. Wing-measurements show no appreciable difference between western and eastern birds, *i. e.*, western : males 133 to 155, females 133 to 140 ; eastern : males 133 to 155, females 145 to 150 mm. Thirty-five specimens examined.

We are unable to see any characters by which races can be separated, and therefore, recognize only one form :—

Streptopelia vinacea (Gmel.).

Columba vinacea Gmelin, Syst. Nat. i. pt. 2, 1789, p. 782 : Senegal ; of which all other described races are synonyms.

Distribution.—Senegal eastwards to the Sudan, Eritrea, and Abyssinia.

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BULLETIN

OF THE

BRITISH ORNITHOLOGISTS' CLUB.

No. CCCCXVII.

The four-hundred-and-twelfth Ordinary Meeting was held at the Rembrandt Hotel, Thurloe Place, S.W. 7, on Wednesday, November 9, 1938.

Chairman : Dr. G. Carmichael Low.

Members present :—W. B. Alexander ; Dr. D. A. Bannerman ; Miss Phyllis Barclay-Smith ; Dr. F. J. F. Barrington ; Miss M. G. Best ; The Hon. Guy Charteris (*Vice-Chairman*) ; H. P. O. Cleave ; Miss J. M. Ferrier ; James Fisher ; Capt. H. A. Gilbert ; Miss Eva M. Godman ; Capt. C. H. B. Grant (*Editor*) ; B. G. Harrison ; Dr. J. M. Harrison ; R. E. Heath ; P. A. D. Hollom ; Dr. E. H. Hopkinson ; The Rev. F. C. R. Jourdain ; N. B. Kinnear ; Miss E. P. Leach ; Dr. P. R. Lowe ; C. W. Mackworth-Praed ; J. H. McKittrick, Jun. ; J. H. McNeile ; Dr. P. Manson-Bahr ; J. G. Mavrogordato ; Col. R. F. Meikle-john ; T. H. Newman ; Chas. Oldham ; B. B. Osmaston ; Mrs. M. Priestley ; Miss G. M. Rhodes ; D. Seth-Smith ; Major A. G. L. Sladen (*Treasurer*) ; Dr. C. B. Ticehurst ; B. W. Tucker ; Mrs. W. Boyd Watt ; H. F. Witherby.

B. O. U. Members present :—A. McMillan.

Guest of the Club :—A. H. Chisholm.

Guests :—Major G. Aylmer ; Sir Thomas Dunhill ; Mrs. Gilbert ; R. Johnson ; Mrs. Meiklejohn ; R. C. Milward ; Miss D. V. Raikes ; Miss Ada Walter Thomas ; and one other.

B. O. C. members, 39 ; B. O. U. members, 1 ; guests of the Club, 1 ; guests, 9.

Films of the Lyre-Bird and the Satin Bower-Bird.

Mr. A. H. Chisholm, C.F.A.O.U., of Australia, showed motion films of the fauna of his country. The most ambitious one related to the Lyre-bird (*Menura*) ; it was a sound film which occupied the intervals of three years in the making. The scene was Sherbrook Forest, near Melbourne. In the early part of the picture a female Lyre-bird was shown at the nest tending the single young bird. This was interesting ; but the most fascinating and obviously most difficult portion of the picture was that devoted to the spectacular male bird, which was shown displaying his beautiful tail and " dancing " on the tumulus in the forest which serves as a display mound. Regrettably, the machine available could not render the mimetic song of the bird, which is given while the display is in progress—a rare accomplishment for any bird and unique in the case of a bird as large as a domestic fowl. Even as a " non-talkie," however, the fiilm was highly attractive.

The other films shown by Mr. Chisholm were devoted to the building of a " theatre " by a full-plumaged male Satin Bower-bird, and the behaviour of a Platypus in captivity. All the stages of the building of the remarkable bower were shown in the bird picture, and a good general impression of the movements of the ancient egg-laying mammal was given in the film of the platypus. In each case, as with the Lyre-bird, the visitor spoke on the habits of the creature illustrated.

Mr. Chisholm, who was thanked by the Chairman (Dr. G. Carmichael Low) and Mr. Gregory Mathews, subsequently answered a number of questions concerning each of the creatures shown in the films.

Notes on Spring Migrants in Arabia.

Mr. G. L. Bates sent the following :—

Some birds recently received by the British Museum from Mr. Philby are of interest as establishing the spring migration of some more species across Arabia, and as showing how late some of them, presumably still going farther north, were lingering there. They were collected, some at Jidda, but most in northern Arabia in the region centring round Hail, in 1938. The most notable are :—

Plegadis f. falcinellus.

A fine male Glossy Ibis in summer plumage was shot by M. E. Kazi on the shore at Jidda, 7 April. This is the first record of this species for Arabia.

Two male Garganeys and a male Shoveler, all in breeding plumage, were also shot by Mr. Kazi at the same place in April.

Falco n. naumanni.

Shot at Qafar near Hail, 30 May. Mr. Philby saw many of them at the time, hunting grasshoppers and settling in ithil trees in groups of half a dozen.

Erolia minuta.

Several beautiful skins of the Little Stint in summer plumage, shot near Hail on 29 May, at Buraida on 6 June, at Junaitha on 12 June, and at Marrat on 14 June. These places are in Shammar, Qasim, and Washm, in the very middle of the northern half of Arabia.

Glareola p. pratincola.

At Buraida on 6 June several were obtained and "quite a number seen sitting about in lucerne fields."

Oriolus o. oriolus.

Orioles were secured by Mr. Philby at and near Hail in the last days of May ; in a letter written at Riyadh in July he tells of having a record of it there on July 5, and says "they completely disappear for a very brief space in the summer."

Irania gutturalis.
Wadi Rima in Qasim on 8 June.

Lanius minor.
Obtained at Riyadh on 6 July.

Notes on Eastern African Birds.

Capt. C. H. B. Grant and Mr. C. W. Mackworth-Praed sent the following four notes :—

(1) A further note on the Relationship, Status, and Distribution of *Egretta garzetta*, *E. gularis*, *E. schistacea*, and *E. dimorpha*.

In the Orn. Monatsb. xliv. 1936, p. 29, the late Dr. Steinbacher reiterates the various points raised by ourselves in the Bull. B. O. C. liii. 1933, p. 189, p. 245, and liv. 1933, p. 73. He agrees with all our decisions, with the exception of that on the East African birds, which he considers should bear the name of *Egretta cineracea* (Cabanis) in Van der Decken's Reisen, Ost. Afr. 1869, p. 49 : East Africa.

He says : " There is a Heron breeding on the coast of the former German East Africa (appearing on its whole length including Zanzibar and Pemba) which agrees fully with *dimorpha* in the colour of the beak and the plumage, but which is exactly like *gularis* in size. The beak is, therefore, black ; birds in grey plumage always have a brown beak, therefore I take it (and also the grey *gularis*) that they are not yet in full plumage. What is the name of this bird ? According to my opinion *Egretta cineracea* (Cab.)."

Steinbacher's argument is that a " multi-phased " Egret occurs on the east coast of Africa which has nothing to do with *E. garzetta*, and is a different race and even species to the typical white *E. garzetta* and is not the bird which breeds at Lake Victoria, South Africa, etc. ; and he places *E. g. gularis*, *E. g. cineracea*, and *E. g. dimorpha* in one group.

Steinbacher further states that *E. gularis* is easy to recognize in West Africa because it " is not yet known in a pure white plumage," and by the colour of the bill, but says

" the position is different on the East African coasts, where white *cineracea* and *garzetta* are not so easy to differentiate."

If the difference between *E. gularis* and *E. garzetta* is in the colour of the bill, and on this we based some of our conclusions, we fail to see how a race that has a black bill, as has *E. dimorpha*, can be placed under *E. gularis*, which has a dusky brown bill. Steinbacher admits the difficulty of distinguishing birds in white plumage, but does not tell us how we can do so, and if we follow Steinbacher's argument we find ouselves in the old position of all the coloured birds being one name, say *E. g. cineracea*, and all the white birds being *E. garzetta*. If we do this we ignore the clear example before us of the Madagascar black-billed Egret, which we know is dimorphic, both coloured and white young birds having been found in the same nest, and it was largely on this example that we came to the conclusion that as white and coloured birds from eastern Africa were identical in structure, size, and colour of soft parts with typical *E. garzetta*, we had here not a race of *E. garzetta* but the remnants of dimorphism which at one time had a much wider range, probably to both Europe and southern Africa.

In November 1937 Mackworth-Praed examined the types of *Herodias procerula* and *Herodias cineracea* at the Berlin Museum. Both are mounted, and the latter is in very bad condition. The type of *H. procerula* is true *E. garzetta*, with long plumes, blackish legs, etc., and appears to be almost in breeding plumage. The type of *H. cineracea* is blue with white alulæ. Under date May 5, 1933, the late Dr. Hartert examined the type of *H. cineracea* and advised us that it was quite a young bird in first plumage with a deep brown bill, thus agreeing with similar young birds in the British Museum collection, but this pale grey plumage is not necessarily confined only to young birds, but the brown, not black, bill is characteristic of the young bird of *E. garzetta*.

We fail to see that Steinbacher has brought forward any fresh argument and on which we could find cause to reconsider and alter our decisions.

As our conclusions have now appeared in three different numbers of the Bulletin (liii. 1933, pp. 189–196 ; liii. pp. 245–246 ; liv. pp. 73–75), it seems desirable to re-summarize the recognizable species and races in Africa and their distribution :—

Egretta garzetta garzetta (Linnæus).

Bill black, except young birds which have a brown or dusky bill. Subject to dimorphism in west and east Africa.

Distribution :—Southern Europe, east to Japan and the Philippines, Africa throughout, Zanzibar, Pemba, and Cape Verde Islands.

Egretta garzetta dimorpha Hartert.

Similar to *E. g. garzetta*, but averaging larger, and the coloured form has the feathers at base of lower mandible coloured, not white. Also dimorphic.

Distribution.—Madagascar.

Egretta garzetta assumptionis Grant & Praed.

Similar to *E. g. garzetta* but bill longer. Also dimorphic.

Distribution.—Assumption and Aldabra Islands, north of Madagascar.

Egretta gularis (Bosc).

Bill always dusky, not black at any age. Also dimorphic.

Distribution.—Senegal to French Congo, Islands of Annobon, Los, San Thomé, Fernando Po, and Principe.

Egretta schistacea (Ehrenberg).

Bill yellow. Also dimorphic.

Distribution.—Nile Valley up to Lake Albert, both coasts of Red Sea to Cape Guardafui and east to Ceylon and the Laccadives.

(2) On the races of *Campethera tæniolæma* Reichenow & Neumann, Orn. Monatsb. 1895, p. 73 : Eldoma Ravine, western Kenya Colony.

Sclater, Syst. Av. Æthiop. i. 1924, p. 294, recognizes two races ; Friedmann, Bull. 153, U.S. Nat. Mus. 1930, p. 474, recognizes three races ; Granvik, Rev. Zool. et Bot. Afr. xxv. 1934, p. 52, recognizes two races ; Van Someren, Nov. Zool.

xxix. 1922, p. 65 and Nov. Zool. xxxvii. 1932, p. 283, recognizes three races. The specimens in the British Museum collection show that the characters given for the races do not hold good and that the young bird has broader and less sharp barring on the underparts. There is some individual variation among birds from the same locality. We are therefore of opinion that *C. tæniolæma hausburgi* Sharpe, Bull. B. O. C. xi. 1900, p. 36 : Mt. Kenya, and *C. t. barakæ* van Someren, Bull. B. O. C. xl. 1920, p. 96 : Baraka, Belgian Congo, must become synonyms of *C. tæniolæma* Reichw. & Neum.

(3) On the Status of *Poicephalus gulielmi permistus* Neumann, J. f. O. 1931, p. 547 : Eldoma Ravine, Mau, Kenya Colony.

A comparison of specimens from Mau, Ravine, and near Arusha do not support the characters given for this race, *i. e.*, the forehead patch, the bill, and the blue colouring, as we cannot distinguish between them, and there is undoubtedly a certain amount of individual variation in general colour, and the amount of orange red on the forehead varies according to age. We therefore consider *P. g. permistus* Neum. to be a synonym of *P. g. massaicus* Fisch. & Reichw.

(4) On *Poicephalus fuscicapillus tanganidæ* Bowen, Proc. Ac. Nat. Sci. Philad. lxxxii. 1930, p. 267 : Kilosa District, Tanganyika Territory.

Bowen gives as characters considerably smaller, wing males 148–159 ; females 145–152 mm. and some differences in colour. Measurements of specimens in the British Museum collection give :—Kilosa and Morogoro, three males 147–151 ; one female, 150 mm. Inhambane and Beira three males 153–160 ; two females 152–157 mm. This shows that the measurements of *P. cryptoxanthus* Peters, Monatsb. Akad. Berlin, 1854, p. 371 : Inhambane, Portuguese East Africa, are practically the same as for *P. f. tanganyikæ*, i. e., males 153–160, as against 147–159 ; females 150–157, as against 145–152 mm. This, together with the individual variability in colouring, precludes us from recognizing this race, which must become a synonym of *Poicephalus cryptoxanthus* Peters.

5 DEC 1938
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BULLETIN

25 JAN 1939
PURCHASED

OF THE

BRITISH ORNITHOLOGISTS' CLUB.

No. CCCCXVIII.

The four-hundred-and-thirteenth Meeting of the Club was held at the Rembrandt Hotel, Thurloe Place, S.W., on Wednesday, December 14, 1938.

Chairman : Dr. A. Landsborough Thomson.

Members present :—Miss C. M. Acland ; Dr. D. A. Bannerman ; Miss P. Barclay-Smith ; Miss M. G. Best ; Hon. G. Charteris (*Vice-Chairman*) ; Miss J. M. Ferrier ; J. Fisher ; Miss E. M. Godman ; Capt. C. H. B. Grant (*Editor*) ; Col. A. E. Hamerton ; B. G. Harrison ; Dr. J. M. Harrison ; P. A. D. Hollom ; Rev. F. C. R. Jourdain ; N. B. Kinnear ; Miss C. Longfield ; Dr. G. Carmichael Low (*Vice-Chairman*) ; Dr. P. H. Manson Bahr ; G. M. Mathews ; J. H. McNeile ; J. Mavrogordato ; Col. R. Meinertzhagen ; C. Oldham ; B. B. Osmaston ; H. Leyborne Popham ; C. W. Mackworth-Praed ; Miss G. Rhodes ; D. Seth-Smith ; C. R. Stonor (*Hon. Sec.*) ; B. W. Tucker ; H. Whistler ; H. F. Witherby ; C. de Worms.

Guests :—A. H. Chisholm ; Miss C. Godman ; Dr. C. E. Hellmayr ; Miss Lynes ; D. H. Manson-Bahr ; P. H. Martin ; P. M. Martin ; Col. W. A. Payn ; H. Mackworth-Praed ; Mrs. A. L. Thomson.

Members present 34 ; Guests 10.

The Chairman referred to the desirability of increasing the number of exhibits at meetings of the Club, a respect in which there had been considerable falling off in recent years. He intimated that the Committee had instructed the Editor not to accept descriptions of new forms and the like for publication in the 'Bulletin' unless the specimens had been exhibited at a meeting, except where specimens were not available or there was other good reason why they could not be shown.

CHAIRMAN'S ADDRESS.

Review of the Past Year.

(November 1, 1937, to October 31, 1938.)

Dr. A. Landsborough Thomson said: During the past twelve months, Ornithology has lost by death some distinguished students, including:—Louis-Marcellin Bureau, patriarch of French ornithologists; Sergei Alexandrovitch Buturlin, a great authority on the birds of Russia; William Eagle Clarke, Ex-President and Godman-Salvin Medallist of the British Ornithologists' Union, and a pioneer investigator of bird-migration; Henri Jouard, co-editor of 'Alauda'; Walter J. Lyon, President of the Inland Bird-Banding Association of America; Friedrich Steinbacher, President of the Deutsche Ornithologische Gesellschaft; and Johannes Thienemann, formerly director of the same society's station at Rossitten.

The event of the year was the Ninth International Congress, held at Rouen in May, under the presidency of Professor A. Ghigi, and with Monsieur J. Delacour as General Secretary. This was attended by ornithologists from many countries, and was a very successful meeting.

Other matters can be most conveniently mentioned under regional headings.

Europe.

The appearance of the first two volumes of the new edition of the 'Handbook of British Birds,' by Messrs. H. F. Witherby, F. C. R. Jourdain, N. F. Ticehurst, and B. W. Tucker, has been acclaimed with widespread appreciation. This work is

obviously destined to be of even greater importance and value than its predecessor. The series of coloured plates showing various plumages of each species should prove extremely useful.

Two works of generally similar scope are in progress of publication on the Continent: in Germany, the 'Handbuch der deutschen Vogelkunde,' by Dr. G. Niethammer and others; and in Holland 'De Nederlandsche Vogels,' by Dr. C. Eyckman and others. A work on the fauna of the U.S.S.R. is also in course of issue, and a part dealing with birds (by B. Stegmann) has appeared during the year.

Matters of local British interest have included the breeding of the Little Ringed Plover (*Charadrius dubius curonicus*) in Hertfordshire, for the first time in this country; and the admission to the British List of three additional subspecies:—the Hebridean Rock-Pipit (*Anthus spinoletta meinertzhageni*), the Western Little Bustard (*Otis tetrax tetrax*), and the Northern Razorbill (*Alca torda torda*). The Pallid Harrier (*Circus macrourus*) has been recorded for the second time, and the Black Kite (*Milvus migrans*) for the third time, in the British Isles.

The breeding of the Whiskered Tern (*Chlidonias hybrida*) in Holland for the first time, as the sequel to a small invasion, is also a matter of considerable interest.

Colonel R. Meinertzhagen paid a short visit to Finnish Lapland in winter, a time when little research has been done, and made some interesting observations—including the presence of Fischer's Eider (*Arctonetta fischeri*) in European waters.

Asia.

Mr. H. St. J. Philby has been travelling in northern Arabia, visiting areas which he passed through in 1935: the ornithological results are being worked out by Mr. G. L. Bates. Messrs. H. Whistler and N. B. Kinnear have issued the final part of their survey of the birds of the Eastern Ghats. Herr Heinrich has returned to Germany from Mt. Victoria in the southern Chin Hills with an important collection of birds. Mr. J. K. Stanford and Dr. C. B. Ticehurst have added to

knowledge of the avifauna of northern Burma, and Colonel R. Meinhertzhagen to that of northern Afghanistan : Mr. Stanford has since accompanied the Vernay-Kingdon Ward expedition to the Burma–Yunnan frontier. Messrs. G. Ludlow and Sherriff are again in Bhutan and southern Tibet. Herr E. Schäfer has published an important monograph on the results of two expeditions in Tibet, in the ' Journal für Ornithologie.' Herren Dr. E. Stresemann, W. Meise, and M. Schönwetter have published, in the same journal, the second part of their account of the birds collected by Beick in northern Kansu.

Through Baron Rodolphe M. de Schauensee, further important collections from Siam have reached the Academy of Natural Sciences in Philadelphia. Mr. G. N. Chasen's new volume on Malay birds is in the press.

Baron V. von Plessen has investigated the hitherto unknown avifauna of the island Penida, off the south coast of Bali ; and Herr Menden explored the islands of Peling and Taliaboe, east of the Celebes. The series of valuable papers by Messrs. A. Hoogerwerf and G. F. H. W. Rengers Hora Siccama on the ornithology of Batavia continues to appear in ' Ardea.'

Although published at the end of 1936, a work by Tsen Hwang Shaw on the birds of Hopei Province, in northern China, has only recently become known here. It is the first important work on ornithology by Chinese workers, and is printed in English.

Africa.

Colonel R. Meinertzhagen has lately been on an expedition to Morocco.

An Italian expedition has added an entirely new genus of Corvidæ to science—*Zavattariornis*, described by Dr. E. Moltoni, from the semi-desert of southern Ethiopia. Sir Geoffrey Archer and Miss E. M. Godman have published the first two volumes of a work on the birds of British Somaliland and the Gulf of Aden. A three-volume work on the birds of Kenya and Uganda by the late Sir Frederick Jackson and Mr. W. L. Sclater has also been published. Mr. R. E. Moreau continues to be active in Tanganyika Territory, and Mr. C. W. Benson has made some interesting discoveries in

Nyasaland. Mr. C. W. Mackworth-Praed and Captain C. H. B. Grant continue to work on East African birds.

Dr. J. P. Chapin has brought back skins of his Congo Peacock (*Afropavo congensis*) from the forest south-east of Stanleyville in the Belgian Congo. He has completed the proofs of the second volume of his account of the birds of that country. The fifth volume of Dr. D. A. Bannerman's 'Birds of Tropical West Africa' is now in the press.

Herr W. Hoesch continues his work in South-west Africa, where he has now been joined by Herr Niethammer. Rear-Admiral H. Lynes has again gone to South Africa in search of *Cisticola* spp.

Australasia and Oceania.

Collections from New Guinea have been brought to the United States by Mr. Dillon Ripley, and sent there by Herr Kiell von Sneidern. Mr. A. L. Rand has left that country for New Guinea, where he will continue his investigations in the interior with the aid of a large modern amphibian plane.

North and Central America.

Dr. C. E. Hellmayr's volume on the Finches, in the 'Birds of the Americas,' is now in the press.

Mr. A. C. Bent has published the eleventh volume of his great work on the 'Life Histories of North American Birds': this covers the remainder of the Falconiformes and the Striges.

Further interesting field-work has been done by representatives of the United States National Museum in continuation of the programme for the study of subspecies of birds in the Appalachian Mountain region.

Mr. James Bond has done further work in the West Indies.

Dr. F. M. Chapman has continued his investigations at the tropical laboratory on Barro Colorado Island, Panama, and has completed another volume dealing with his studies in that interesting locality.

A publication of the Field Museum on the birds of El Salvador, by Messrs. D. R. Dickey and A. J. van Rossem, adds to available information on the avifauna of Central America.

The Public Schools Exploring Society from this country went this year again to Newfoundland, and an interesting collection of birds was made under Mr. Heycock.

South America.

Messrs. D. L. Lack and L. S. V. Venables have just left this country for the Galapagos on an expedition, aided by this Club and other bodies, of which an important object is the study of the Geospizidæ.

Dr. A. Wetmore, on behalf of the Smithsonian Institution, has made an ornithological reconnaissance in northern Venezuela. For the Field Museum, Mr. Emmet R. Blake has made extensive collections in British Guiana and Brazil. Messrs. M. A. Carriker and Gordon Howes have been collecting in Bolivia.

The first part has appeared of Senor O. M. de Olieveira Pinto's ' Catalogo das Aves do Brasil,' which gives a modern list for that important country.

Mr. A. R. G. Morrison has completed his trip to Huancavilica in south-central Peru, of which an account will appear in ' The Ibis,' and has now left again for Chile.

Arctic and Antarctic.

Mr. C. G. Bird has just returned from a stay of two years in East Greenland, and has brought back further collections of skins. Eggs of the Knot (*Calidris canutus*) and Sanderling (*Crocethia alba*) were also secured.

Mr. T. Manning is still on Southampton Island, at the entrance to Hudson Bay, and was joined by the late Mr. Bray. Messrs. J. H. McNeile and B. G. Harrison have made a further visit to Spitzbergen.

Mr. B. B. Roberts is preparing the results of recent work in the Antarctic for publication by the British Museum.

General.

Dr. J. L. Peters has completed the manuscript for the fourth volume of his monumental ' Check-list of the Birds of the World.'

As examples of studies of life and behaviour, mention may be made of Mr. J. M. Linsdale's monograph on the natural history of the Magpies; of Miss A. Hibbert-Ware's report for the British Trust for Ornithology on the food of the Little Owl; of Herr W. Makatsch's survey of 'Der Brutparasitismus der Kuckkucksvögel'; and of papers by Messrs. W. Wuczeticz and A. Tugarinov on the results of ringing ducks on the Volga Delta. Although it was actually published shortly before the beginning of the period under review, I should like to make special mention also of the study by Mrs. M. M. Nice of the 'Life History of the Song Sparrow' (Part I.), which constitutes a landmark in work of this kind, and is of interest from several points of view.

For valuable help in collecting information for this review, I gratefully make acknowledgment to Dr. Alexander Wetmore, Dr. H. Friedmann, Dr. E. Stresemann, and the Rev. F. C. R. Jourdain, as well as to Mr. N. B. Kinnear and others in the Bird Room at the British Museum (Natural History).

Some Remarks on the Present Position of the Orientation Problem.

Dr. A. Landsborough Thomson, continuing, said that he wished to devote the second part of his address to a few remarks on a special topic. He had selected the orientation problem because of the fresh interest that had been aroused in it by the remarkable results obtained during the last few years in homing experiments with wild birds, and by consequent revival of theoretical speculation as to how birds—both in such experiments and on migration in the natural course—find their way.

It is now nearly a quarter of a century since Watson and Lashley, in America, published the results of their experiments with Noddy and Sooty Terns, removed from their breeding places on the Tortugas Islands in the Gulf of Mexico. It was shown that these birds, when transported by ship in closed cages, were able to return to their nests from points on the mainland over 850 miles to the east or to the north, or from intermediate points at sea entirely out of sight of land. When

taken northward, moreover, the birds were liberated beyond the limits of the natural range of the species.

Many homing experiments with different wild birds have been made since then, but mostly over relatively short distances. It is only in the last few years that results comparable in interest with those of Watson and Lashley have been recorded.

Rüppell, in Germany, has been notably successful. In his 1934 experiments, Swallows returned to their breeding places from distances of up to 311 miles (Arnheim in Holland to near Berlin), the best time being 255 miles in just under 26 hours ; a House-Martin also returned from Holland, 317 miles, by the third day. In Poland in the same year, Wodzicki and Wojtusick recorded a Swallow which returned from 74 miles away in 3 hours. A large scale experiment made in Germany by Hilprecht, in removing birds of various species during the winter, gave mostly negative results, although the distances were only moderate : some of the birds, however, re-appeared in spring at the place of original capture.

In Rüppell's 1935 experiments, five out of seven breeding Swallows returned from Croydon to near Bremen, a distance of 428 miles, the best recorded time being a little over four days. Subsequently, two House-Martins did almost the same journey in under two and a half days. Other results included return flights of Starlings from distances of up to 438 miles (from Silesia). In 1936, Rüppell obtained evidence of successful homing to Berlin on the part of Swallows from London, Madrid, and Athens ; of Wrynecks from London, Munich, Venice, and Salonika ; and of a Red-backed Shrike from Marseilles.

No less remarkable are the results obtained by Lack and Lockley, in 1936 and 1937, in experiments with Manx Shearwaters taken from their nesting burrows on Skokholm, off Pembrokeshire. The records include return journeys from Surrey (200 miles in direct line, or 390 miles by sea-route) in 24 hours ; from the Firth of Forth (340 miles direct, or 800 by sea) in eleven days ; from the Faeroes (730 miles) in twelve days ; and from Venice (930 miles direct, 3700 by sea) in fourteen days.

In the present year, Wodzicki, Puchalski, and Liche have recorded experiments in Poland with White Storks. Breeding birds removed from near Lwow returned successfully from Warsaw, from Bucharest, and from Lydda in Palestine—distances of about 185, 410, and 1400 miles, respectively. The return journey from Palestine was made at the rate of 116 miles per day.

Lyon, in America, has made experiments with Cowbirds, but a full published account is not yet to hand. Birds are stated to have returned from New Orleans and from Edmonton, Alberta, to Waukegan, Illinois, distances of about 1000 and 1500 miles. Considering that homing powers have been found chiefly in the case of parent birds removed from their nests, it is of some interest that they are well developed in a species which is parasitic in its breeding habits.

These homing feats of wild birds are much more remarkable than those of domestic Pigeons bred for the purpose. Pigeons are usually raced from the same direction, and they are trained over gradually increasing distances at first, although later these may be lengthened by jumps of 100–150 miles. Moreover, in big races the birds may fly in company for the first part of the way after release. It should also be noted that there is an enormous wastage of birds, during both training and subsequent racing.

The natural homing of migrants to their native or former breeding localities is obviously not strictly analogous. The birds have made the outward journey under their own power, although admittedly the return flight may not always follow quite the same course. The first autumn migration of young birds, in cases where these do not travel in company with their parents, involves different considerations : here not only the route but the goal is unknown to the individual, and some hereditary factor must play a part in determining the direction taken. Yet it seems reasonable to suppose that the actual process of orientation is probably similar in all cases.

It seems certain that visual recognition of landmarks play a large part in some cases. Pigeons may indeed depend almost entirely upon this, with perhaps guidance by more

experienced birds during first flights over new country. In the case of migrants, if there is not specific recognition of particular landmarks there is at least much use of geographical features as guiding lines. On the latter assumption, however, it is clear that some other factor governing the general direction of the journey must also operate to determine the choice of suitable features. Flights over wide stretches of sea (and perhaps of desert), furthermore, seem to imply some faculty of maintaining a direction of flight without the aid of visible landmarks. The fact that much migration is nocturnal, however, does not necessarily exclude the use of vision.

On the whole, apart from the question of hereditary factors in migration, the homing experiments with wild birds seem to present the more baffling problem. It is not a matter of finding a way between points of known relationship: the difficulty is to understand how the direction of "home" from a completely unknown point can be appreciated. The proportion of successful returns in some cases, and the speed with which the journey can be accomplished, seems to exclude any possibility of mere random casting about until known landmarks are picked up. In some instances, such as that of a White Stork returning from Palestine to Poland, previous knowledge of the country from migration experience may possibly be utilised; but in others anything of the kind appears to be out of the question.

One line of explanation is to suppose that, in spite of the conditions of transportation, the birds are able to register the direction of the outward journey. Some of the recent homing experiments have been designed to test ideas of this kind. Thus Kluijver, in Holland, transported Starlings under an anæsthetic for part of the way; Rüppell has subjected some of his birds to continuous rotation in the dark throughout the journey; "faradic cages" have also been used, to exclude possible electrical or magnetic influences. In general, these procedures have not diminished homing capacity in any observable degree. This confirms earlier work of the same kind with Pigeons.

A negative result, it may be mentioned, was obtained by

Rüppell with Starlings reared in captivity, where they bred in the following spring. These birds, when removed from their nests, failed to return home from a distance of 71 miles, and a few were afterwards recovered near the place of release.

Some may be content to say that birds must have a special "sense of direction," and to leave it at that. But this is merely to give the phenomenon a name, and not an explanation. The term has indeed no exact meaning, unless it is associated with some idea as to the nature of the thing perceived and of the physiological channel of perception. In this regard one has to remember that direction is not an entity, but merely a relationship between different points.

Various attempts have been made to propound a satisfactory theory in terms of sensitivity to terrestrial magnetism. Stresemann has recently revived this idea, in the light of the homing results such as have here been mentioned, with the suggestion that the function may be located in the statoliths of the avian ear. No evidence of sensitivity to magnetism, however, has ever been obtained in laboratory experiments on the subject. (It may be added that statements in the popular press about homing Pigeons being affected by broadcasting stations have not been substantiated.) Nor has there yet been any really adequate theory as to how the phenomena of terrestrial magnetism could serve the purposes of orientation. It is not, for instance, enough to assume a capacity to detect the direction of Magnetic North : this would by itself be no more serviceable to a bird than would a compass to a human being not possessed also of a map or at least of a mental picture of the country to be traversed. It would be necessary, at the least, to assume sensitivity to the minute differences in the component factors of terrestrial magnetism which characterise particular places ; and for such an assumption there is at present no substantial justification.

On the purely theoretical side, therefore, one is driven to conclude that the orientation problem remains very much as it was. The new facts that have recently been obtained are nevertheless of much interest, and it is to be hoped that further additions to our knowledge of this subject will be made.

Semi-albino Birds from Britain.

Colonel W. A. Payn exhibited a series of semi-albino and other curiously marked birds, and made some remarks about them :—

Crex crex. Landrail.
A partial albino.

Emberiza citrinella. Yellowhammer.
Calcarius lapponicus. Lapland Bunting.
Both with symmetrical white bars in the wing, covering the same part of the plumage. The Lapland Bunting had been three years in captivity.

Emberiza citrinella. Yellowhammer.
Plumage generally pale all over. Evidently a fairly common variety.

Carduelis carduelis britannica. Goldfinch.
Albino all over, except for red mask and yellow bars in wings.

Fulica atra. Coot.
Gallinula chloropus. Moorhen.
A nestling of each. To illustrate the difference between the two and the claw on the wing in the nestling of both.

Sturnus vulgaris vulgaris. Starling.
Change of plumage from juvenile to first winter. Change of body completed and head hardly begun.

Alauda arvensis arvensis. Skylark.
A nestling one day old to illustrate the length of down on a newly hatched bird. Evidently for purpose of protection to a ground-breeding bird whose nest is not concealed from above.

Charadrius hiaticula tundræ. Siberian Ringed Plover.
A specimen acquired at Blakeney, very typical of this form.

Proceedings of the Eighth International Congress.

The Rev. F. C. R. Jourdain brought up for inspection two copies of the 'Proceedings of the Eighth International Ornithological Congress, Oxford, July 1934,' printed at the University Press, Oxford. One copy was in paper cover, the other bound in cloth: the latter type will be supplied to members at an extra charge of 3*s*. 6*d*., but intending purchasers should notify the Secretary as soon as possible, as the number will be limited. The work (pp. x, 762) contains an account of the Congress and Long Excursion, list of members, etc., and over 60 papers are reported in full in either English, French, German, or Italian.

Conservation in California.

Dr. P. H. Manson-Bahr showed photographs and gave a talk on the conservation of bird life in California.

A new Race of Penduline Tit.

Dr. D. A. Bannerman proposed the following name for the Least Penduline Tit which has been discovered on the Gold Coast:—

Anthoscopus parvulus aureus, subsp. nov.

As mentioned in Bull. B. O. C. lv. 1935, p. 131, this tiny Penduline Tit is most nearly allied to the typical subsp. which occurs in the Anglo-Egyptian Sudan and Bahr el Ghazal rather than with the more brightly coloured specimens which are found on the Upper Volta, which I referred to *A. p. senegalensis*.

Description.—*A. p. aureus* differs from *A. p. parvulus* in having but a faint indication of the yellow forehead, which is dull yellowish, blending more with the crown and with only a few dull blackish dots, instead of a bright yellow forehead with jet-black dots as in the other races. It has also a duller, less yellow, throat when compared with *A. p. parvulus* or *A. p. senegalensis*, and is much duller on the upperside than *A. p. senegalensis*, though approaching in

this respect *A. p. parvulus*. *A. p. citrinus*—the Ubangi-Shari-East Cameroons form—is very much brighter yellow throughout.

Type, ♀ adult, no. 732, Brit. Mus. Reg. no. 1935.7.17.98, Bole, N. Territories, Gold Coast. Colls. W. P. Lowe and Miss Fanny Waldron, January 10, 1935.

Measurements of Type.—Bill 8 ; wing 50 ; tail 28 ; tarsus 12·5 mm.

Observations.—Unfortunately this bird has already been quoted in Mr. W. P. Lowe's report in ' The Ibis,' 1937, p. 848, as the typical subspecies, but there is good reason for bestowing a new name upon this bird, and for considering it a distinct subspecies. Apart from the slight differences which it exhibits in plumage, there is an area of some 2000 miles separating the range of the two forms, and in the intervening country, at any rate in the Ubangi-Shari, the very bright-coloured *Anthoscopus parvulus citrinus* occurs as represented in the British Museum by a specimen collected by Boyd Alexander on the Bamingui river.

Considering these points, I have no choice but to name the bird which Mr. Willoughby Lowe and his companion obtained at Bole.

A new Francolin from Nyasaland.

Mr. C. W. Benson sent the following description :—

Francolinus squamatus doni, subsp. nov.

Description.—Most closely resembles *Francolinus squamatus schuetti* Cabanis, Journ. Ornith. 1880, p. 351, pl. ii. 1881 : Lunda, Angola, but differs from it in that the dark-centred light-edged feathers both on the upperside and the underside have centres more rufous-brown. Also the crown is not brownish, but greyish.

Soft parts.—Bill red ; feet vermilion ; soles dull vermilion ; iris brown.

Distribution.—Only known so far from the type-locality.

Type.—In the British Museum. Adult male. Vipya Plateau, at an elevation of 6000 feet, 15 miles north-east of

Msimba district headquarters, Nyasaland. Collected by C. W. Benson on September 18, 1938. Collector's no. 1547, Brit. Mus. Reg. no. 1939.1.12.1.

Measurements of Type.—Wing 186 ; tail 85 ; culmen from base 33·5 ; tarsus 52 mm.

Remarks.—This bird inhabits patches of dense evergreen forest in short open grassland. Wing-measurements of five further specimens examined : two males 185, 186 mm. ; three females 164, 165, 180 mm.

This new race is named in honour of Mr. P. J. Don, due largely to whose enthusiasm it was that these birds were collected.

I have not examined any specimens of *F. s. uzungwensis* Bangs & Loveridge, Proc. N. Engl. Zool. Club, xii. 1931, p. 93, Kigogo, Uzungwe Mts., Iringa Province, Tanganyika Territory. Of all the type-localities of races of this species this is the nearest to that of *F. s. doni*, being not more than 400 miles distant. All five specimens of *F. s. usambaræ* in the British Museum have a conspicuous black line on the side of the head. This is very much less conspicuous in *F. s. doni*, but in the description of *F. s. uzungwensis* it is stated that it differs from *F. s. usambaræ* in having the black line on the side of the head more sharply defined.

A new Hill Babbler from Nyasaland.

Mr. C. W. Benson sent the following description :—

Pseudoalcippe pyrrhoptera nyasæ, subsp. nov.

Description.—Differs from *Pseudoalcippe pyrrhoptera pyrrhoptera* (Reichw. & Neumann), Orn. Monat. iii. 1895, p. 75 : Mau, Kenya Colony, in its less bright rufous flanks and under tail-coverts. Both these races differ from *P. pyrrhoptera kivuensis* (Neumann) Bull. Brit. Orn. Cl. xxi. 1908, p. 55 : Sabinio, Ruanda, in not having blackish-grey but brown crowns, and this is the difference between typical *P. p. pyrrhoptera* and *P. p. kivuensis* given by Neumann in Bull. Brit. Orn. Cl. xxi. 1908, p. 55.

Typical *P. p. pyrrhoptera* is represented in the British Museum by three specimens (including one juvenile), and

there are nine specimens of *P. p. kivuensis*, all from Ruwenzori. It might be supposed that this new race is in fact referable to *Turdinus tanganyicæ* Reichenow, Jour. Orn. 1917, p. 391 : Fusi, W. of Lake Tanganyika, Belgian Congo, but Gyldenstolpe has shown in K. Vet.-Akad. Handl. i. no. 3, 1924, p. 171, that it is a synonym of *P. p. kivuensis*. Moreover, in the description of *P. p. tanganyicæ*, it is stated that this bird has a *grey* crown.

Soft Parts.—Upper mandible sepia-grey, lower dirty white ; feet grey, soles dirty white ; iris brown.

Type.—In the British Museum. Adult male, Nyakhowa Mt. (Mt. Laws), near Livingstonia, Nyasaland. Collected by C. W. Benson on October 13, 1938. Collector's no. 1578. Brit. Mus. Reg. no. 1939.1.12.2.

Measurements of Type.—Wing 77, tail 64, culmen from base 19, tarsus 28 mm.

Remarks.—This bird is only known from dense tall evergreen forest at the type-locality, at 6000–7000 feet. It was originally discovered by the Rev. W. P. Young, who presented two specimens to the British Museum, and I have now added four more. Measurements of the five further specimens :— Two males, wings 71, 77 ; two females, wings 73, 69 ; one sex undetermined 69 mm.

The Races of the Black Vulture.

M. Noël Mayaud sent the following communication on the races of *Ægypius monachus* :—

In Bull. B. O. C. lviii. 1938, p. 94, Colonel Meinhertzhagen points out that birds from Chinese Turkestan and China are larger than those from the western and southern area of the species. The Marquess Hachisuka (Bull. B. O. C. lix. 1938, p. 16) agrees with this opinion, and I can confirm the measurements given by Col. Meinertzhagen, but I can also add some data for Spanish, French, and Oriental European birds.

Spain : 2 adult males, Sierra de Guadarrama, May 25 and 26, 1877 (Museum of Nantes, ex L. Bureau). Wing 800–812, culmen 62–64 mm.

France : 1 adult, Plaine de la Crau (Museum of Geneva). Wing 780, abnormal culmen, very hooked, 62·2 mm. 2 immature males, Pyrénées (Mus. of Paris and Geneva). Wing 750–800, culmen 61–63 mm.

Roumania : 1 adult (Mus. of Paris). Wing 775, culmen 61·5 mm.

Near Istanbul, Turkey : 1 adult (Mus. of Nantes, ex Alléon). Wing 834, culmen 64·5 mm.

Balkans and Greece : 1 female, 1st year. Wing 781 mm. 1 immature. Wing 728, culmen 58·2 mm. (Mus. of Nantes, ex. L. Bureau and Parzudaki.)

The length of 834 mm. for an adult specimen from Instanbul is remarkable ; but it is obvious that such a length must be rare, and that European birds are smaller on the average than those from the Eastern area.

With regard to the name of the Eastern race, I think that *Vultur chincou* of Daudin should be accepted. Daudin (1800) and before him Le Vaillant (1796) were as clear and precise as possible concerning the information derived from Ameshof. In his text Levaillant wrote, " N'ayant pu savoir le nom que porte cet oiseau dans son pays natal, qui est le Chine, à ce que m'a assuré le C. Ameshof." " Assuré " is a strong word, and it was hardly possible for the author to insist more definitely upon the indication given as to its native country. For this reason, as well as those relating to the practice of aviculture in China, brought forward by the Marquess Hachisuka, I am in agreement with him in recognizing the validity of the name *chincou* for the Eastern race of the Black Vulture (*Ægypius monachus*).

A new Race of Bronze-winged Dove.

The Marquess Hachisuka sent the following description :—

Chalcophaps indica yamashinai, subsp. nov.

The birds from the Riu Kiu Islands which are found only in the south, differ greatly, at a glance, from the Formosan birds, having on their hind neck and upper back a wash of bluish-slate over the vinous-red.

Type.—Male, in Yamashina's Coll. no. 24221. Yonakuni Island, June 15, 1936. Collected by H. Orii.

Measurements.—Wing 147, tail 82, culmen 17, tarsus 26·5 mm.

Range.—Ishigaki, Iriomote, and Yonakuni in the Southern Riu Kiu Islands.

Material examined.—Twenty males of the new race and many Formosan specimens. The average measurement of the bill is 17–20 mm.

Remarks.—Only a few skins of Bronze-winged Dove had been collected at the time of publication of Dr. Kuroda's monumental work entitled ' Avifauna of the Riu Kiu Islands ' in 1925 ; however, many collections have been made there since, and I am now able to examine a series preserved in the museums of Prince Taka-Tsukasa, Dr. Kuroda, and the Marquis Yamashina. They all agree with me upon the validity of the present race.

Chalcophaps indica formosanus Swinhoe.

Swinhoe, Ibis, 1865, p. 357 (male), p. 540 (female).

In spite of several names having been proposed, the continental Oriental region, as well as the Sunda Islands, also Hainan and Formosa, are considered to be inhabited by the typical race. On my careful examination, the Formosan bird may be separated from the continental ally by having a longer bill (17–19 mm.).

The measurements of the typical birds are :—

India (Baker)	15–16	mm.
Indo-China (Delacour)	14–17	,,
S.E. China (La Touche)	15–16	,,
Java (Vorderman)	17	,,

Chalcophaps indica pileata Scopoli.

Columba pileata Scopoli, Del Flora et Fauna, Insubr. pt. ii. 1786, p. 94 : Panay.

Columba albicapilla Gmelin, Syst. Nat. 1789, p. 775 : Panay.

The coloration of the Philippine birds is much the same

as *C. i. yamashinai*, but its hind neck is somewhat darker; also, it can be distinguished by having a shorter bill (15–16 mm.). Names have been proposed from Amboina, Borneo, the Moluccas, and the Sanghir Islands, but I have no material from these places to compare with the Philippine skins. It is for this reason that I confine the distribution of *Chalcophaps indica pileata* to the Philippine Islands.

A new Species, and a new Race from Peling.

Prof. Oscar Neumann sent the description of a new species and a new subspecies from Peling island, east of Celebes :—

Turdus (Geokichla) mendeni, sp. nov.

Front, middle of head, upper neck, interscapulum, back, rump, and upper tail-coverts cinnamon. Sides of head, wing, all wing-coverts, tail, and whole underside black, the black and the cinnamon colours are very sharply defined. A longitudinal white patch above the eye and a larger white patch behind the eye on the hinder part of the cheek. The upper third of the inner webs of the primaries, with the exception of the first and second, white. The white bar is only visible on the underside of the wing. Iris brown, bill slaty-blue, feet flesh-coloured.

Wing 114, tail 72 mm.

Type.—Peling, alt. 300 m., 24. 8. 38, J. J. Menden leg.

Remarks.—Menden collected only this one specimen. This new Thrush, which is a geographical representative of *Turdus erythronotus* (Celebes), *T. dohertyi* (Lombok and Sumbawa), and *T. dumasi* (Moluccas), differs at once from all thrushes by the extremely sharp delimitation of the three colours.

Scissirostrum dubium pelingense, subsp. nov.

♂ and ♀. Similar to *S. d. dubium* (Lath.) from Celebes, but with longer wing and longer and slenderer bill.

Wing, ♂♂ 99–103, ♀♀ 97–99 mm.; bill, ♂♂ 20·5–22·5, ♀♀ 19–20 mm.

Type ♂.—Peling, alt. 200 m., 17. 7. 38, collected by J. J. Menden.

Remarks.—Menden collected 15 ♂♂, 14 ♀♀ of this race from sea-level to 200 m. height. I compared this series with no less than 23 specimens from Celebes, most collected by Gerd Heinrich, and kept in the Berlin Museum. Their wing-measurements are :—5 ♂♂ from Burukan and Kumerot, N. Celebes, 95–97 mm. ; 3 ♀♀ from there 93–97 mm., 5 ♂♂ from Waro, S.E. Celebes, 93–98, 5 ♀♀ from there 94–96 mm.

Further five specimens without sex and date in my collection, from uncertain locality, collected by John Waterstradt, 92–98 mm. The bill in these specimens is about 16–19·5, but, as it is at least as high as that of the Peling race, it looks stouter and heavier. The length of the tail in *S. d. pelingensis* measures ♂♂ 89–92 and ♀♀ 82–85 mm.

As regards length of the tail there seems to be a difference between the population of N. Celebes and of S.E. Celebes, as I found in ♂♂ and ♀♀ from N. Celebes 65–75 mm., in S.E. Celebes 75–90 mm.

The types of *Geokichla mendeni* and of *Scissirostrum dubium pelingense* will go to the Museum of Comparative Zoology in Cambridge, Mass.

Remarks on the Races of Charadrius hiaticula hiaticula.

Dr. Carmichael Low sent the following note :—

Dr. James M. Harrison (Bull. B. O. C. lix. 1938, pp. 17–18) raises again the question of a British race of *Charadrius hiaticula hiaticula* under the title *Charadrius hiaticula major*. I have already shown (Bull. B. O. C. liv. 1934, pp. 126–127, and ' British Birds,' xxviii. 1934, pp. 64–66) after a careful study of the material in the British Museum and elsewhere, that such a race is distinctly doubtful, and that in my opinion should not stand. I am supported in my contention by Capt. C. H. B. Grant, who also recently went into this question independently, and who decided, after having specimens of breeding birds sent from Sweden to compare with breeding birds in the British Museum, that there was not sufficient evidence to warrant a separation into two races. The question does not lie between Scandinavian, British, and Siberian birds,

but only between the two former, the latter including northern Scandinavia are definitely darker in colour, being separated racially by their size and other features as well.

Swedish breeding birds show quite considerable individual variation, and have both the characters of the more northern and more southern birds. As a matter of fact, Linnaeus described his *Charadrius hiaticula* from an intermediate locality. I have a Finland breeding bird which is as light or even lighter than some of the British birds. There is a tendency for both northern and southern birds to be darker in colour just after their moult, but as time goes on the plumage tends to fade, and bleaching takes place especially in the following summer.

As regards winter birds it is impossible to differentiate them. I have two birds by me now from Shetland, kindly sent me by Mr. J. G. Williams of the Cardiff Museum, and they are very dark, apparently having just moulted, but in a series from Orkney, two are on the dark side, but not so dark as the Shetland birds, while the others are much lighter and approximate to birds from the south. All of these may be local resident birds or quite possibly Scandinavian migrants, but unless we have some other factors than mere colour (measurements, shape, etc.) then it is impossible to say. Measurements of both come within the same limits.

In my paper (' British Birds,' xxviii, 1934, pp. 64–66) I said the Icelandic and Greenlandic race was doubtful, and in my opinion could not stand, but now after seeing and examining a large series of Ringed Plover collected by Messrs. C. G. and E. G. Bird from East Greenland, I am inclined to accept the race (*vide* also C. G. Bird, Bull. B. O. C. lv. 1934, p. 80). The Bird brothers are shortly to publish an account of this collection, so I shall not forestall them here.

Charadrius hiaticula septentrionalis Brehm, just as *Charadrius hiaticula tundræ*, does not come into this issue of the British race at all therefore, and I think it would have been well if Dr. Harrison had consulted the long series of Ringed Plover in the British Museum before writing his paper.

While on the subject of describing new subspecies on different shades of the same colour alone, one should be careful

to remember how much colour can vary or change with climatic conditions. It is not so difficult perhaps with resident birds, such as those dark-coloured birds, for example, in the damp wet climate of the Outer Hebrides, but in migrating birds coming from the north to different climates in the south there is a corresponding change in conditions (more and stronger sun, for example), which may definitely alter the colour and bleach a dark colour into a lighter one very quickly. Again, as Mrs. Meinertzhagen has shown ('A Practical Handbook of British Birds,' ii. 1924, p. 519), the colour on the back of British breeding *Charadrius h. hiaticula* darkens as they pass into their winter plumage, and renders their differentiation from birds from the north of Scotland and Scandinavia difficult, if not impossible.

Some Notes on Eastern African Birds.

Capt. C. H. B. Grant and Mr. C. W. Mackworth-Praed sent the following five notes :—

(1) On the Seasonal Changes of Plumage in *Centropus grillii* Hartlaub, and its Relationship to other Forms.

Dr. James P. Chapin has recently drawn our attention to the seasonal change of plumage in *Centropus grillii*. Bowen, Proc. Ac. Nat. Sci. Philad. xciii. 1931, p. 32, has drawn attention to a non-breeding dress in an adult female from Ikoma Region, Tanganyika Territory, dated June 12, 1929, which is moulting from a black to a brown dress, and has no barring on the wings nor on the under side of the tail.

We have examined the series in the British Museum collection and have found an adult male, no date and no locality, Brit. Mus. Reg. no. 1923.8.7.7213, which is also moulting from a black to a brown dress, and has no barring on the flight-feathers or the under side of the tail. There are in the British Museum collection two other specimens in full non-breeding (brown) dress, *i. e.*, an adult female from Lake Chad, dated February 15, 1905, Brit. Mus. Reg. no. 1923.8.7.7211, and an adult female from Lagos, dated January 8, 1920, Brit. Mus. Reg. no. 1920.6.8.50. All these specimens have a brown-

coloured bill, whereas in breeding dress the bill is black. It is, therefore, clearly established that *Centropus grillii* has a brown non-breeding dress, from which the young bird is at once distinguishable by having the flight-feathers and the under side of the tail barred.

Mr. Hugh Whistler informs us that *Centropus bengalensis* Gmelin, also has a brown non-breeding dress. Rand, Bull. Amer. Mus. Nat. Hist. lxxii. 1936, p. 400, points out that *Centropus toulou* (Müll.) has a non-breeding dress. This is not so complete as in *Centropus grillii*, the blackish colouring being retained on the belly and under tail-coverts. It is also known that *Centropus bengalensis javanicus* Dumont has a brown non-breeding dress. A comparison of *Centropus grillii*, *Centropus bengalensis*, and *Centropus toulou* shows that they are conspecific, and we propose to unite them as follows :—

Centropus toulou toulou (Müller), Syst. Nat. Suppl. 1776, p. 90 : Madagascar, and races.

Centropus toulou bengalensis Gmelin, Syst. Nat. iii. 1788, p. 412 : Bengal, and races.

Centropus toulou grillii Hartlaub, J. f. O. 1861, p. 13 : Gabon, and races.

For not only are they very similar in both breeding and non-breeding dress, but the fact of their having a non-breeding dress (which so far as Africa is concerned appears to be exceptional in the Centropidæ) strongly supports their relationship.

We have yet to learn which dress the young bird of *Centropus grillii* assumes in its first moult. If it moults soon after the end of the breeding season, we would expect to find it assuming a non-breeding dress, but if it does not moult until the beginning of the next breeding season we would expect to find it assuming the black breeding dress.

(2) On *Campothera abingdoni kavirondensis* Van Someren, Bull. B. O. C. xlvii. 1926, p. 70 : Lolgorien, south Kavirondo, south-western Kenya Colony.

Dr. Van Someren has very kindly lent us the type and cotype of this race. These agree with *C. a. smithi* (Malherbe),

Rev. Zool. 1845, p. 403 : Marico District, western Transvaal, in general colour and in the markings of the underparts, including the black throat to upper breast, but the mantle is spotted, not barred. It is true that the young bird of *C. a. smithi* has a spotted mantle, but the adults are distinctly barred. Lynes, J. f. O. 1934, p. 67, obtained a pair of this bird at Iringa, Tanganyika Territory, and listed them as *C. a. smithi*. These specimens are in the British Museum collection, and agree in the spotting of the mantle with Van Someren's specimens, and are therefore *C. a. kavirondensis*. The distribution of *C. a. kavirondensis* is from south-western Kenya Colony to south-central Tanganyika Territory ; the distribution of *C. a. abingdoni* is from eastern South Africa to Kilosa, eastern Tanganyika Territory ; and that of *C. a. mombassica* from southern Italian Somaliland, eastern Kenya Colony and north-eastern and eastern Tanganyika Territory as far south as the Morogoro and Dar-es-Salaam Districts. Thus three races occur in close proximity to each other in Tanganyika Territory, but do not actually overlap in their distribution.

(3) On the Status of *Dendropicos fuscescens* (Vieillot) and *Dendropicos lafresnayi* Malherbe.

In the past all authors accepted two separate groups of these Woodpeckers, *D. fuscescens* and *D. lafresnayi*, and placed under each the different races they recognised. For instance, Van Someren, Nov. Zool. xxix. 1922, places *D. lepidus* as a race of *D. lafresnayi* and *D. massaicus*, *D. centralis*, and *D. albicans* as races of *D. fuscescens*, and furthermore takes *D. hartlaubi* out of both groups and places it as a race of *D. abyssinicus*, as did Claude Grant, Ibis, 1915, p. 460 ; and Roberts, Ann. Trans. Mus. x. 1924, p. 156, has given both *D. fuscescens* and *D. hartlaubi* specific rank with their separate races. Lynes, Journ. für Orn. 1934, p. 68, discusses this question and inclines to the opinion that there is one species only, and Vincent, Ibis, 1935, p. 20, is convinced that only one species exists throughout Africa. In view of these opinions and decisions, we have ourselves examined the question thoroughly, and agree with Lynes and Vincent that *D. fuscescens* and *D. lafresnayi* are conspecific. Therefore

all the races previously attached to *D. lafresnayi*, and including *D. lafresnayi* Malherbe itself, must become races of *D. fuscescens* (Vieillot).

(4) On the correct Type-locality of *Mesopicos goertæ abessinicus* Reichenow, Orn. Monatsb. 1900, p. 58.

Reichenow gives localities Abessinien, Kordofan, Sennar. Dr. Stresemann under date June 24, 1938, very kindly informs us that the type was " collected by Lepsius and Werne before 1850 in Abessinien." Dr. Richard Lepsius (' Discoveries in Egypt,' 1852, ' Discoveries in Egypt, Ethiopia and the Peninsular of Sinai in the Years 1842–1845 ') travelled up the Nile as far as Sero on the Blue Nile, and was therefore never in Abyssinia. Sero is to be found on modern maps as Sereiwa, Sereau, and Sereya, and the Ethiopia of Lepsius was the Meroe and Blue Nile areas of the Sudan.

Ferdinand Werne (Expedition to discover the sources of the White Nile in 1840–1841, 1849) apparently only travelled as far as Wad Medani on the Blue Nile, but travelled up the White Nile almost to the present Sudan–Uganda boundary. Werne, therefore, was never in Abyssinia. Lepsius and Werne did not travel together, the former had as companions Bonomi and Wild, and in the latter's party was Arnaud.

Therefore both Lepsius and Werne could not both have collected this type, but as Lepsius was in that part of the Sudan which he called Ethiopia, as it was then inhabited by Abyssinians, we can agree that the type came from the Blue Nile area. We therefore fix the type-locality as Sereya, some 15 miles north of Roseires, Blue Nile, eastern Sudan.

(5) On the Status of *Jyngipicus obsoletus nigricans* Neumann, J. f. O. 1904, p. 402: Uma River, Konta, southern Abyssinia.

All the characters given by Neumann are to be found in a series of *Y. o. obsoletus*, and the specimen from Langomeri in the British Museum collection mentioned by Neumann agrees perfectly with the series of *Y. o. obsoletus*. We are therefore of opinion that *Jyngipicus obsoletus nigricans* Neumann, must become a synonym of *Yungipicus obsoletus obsoletus* (Wagler).

25 JAN 1939
PURCHASED

8 FEB 1939
PURCHASED

BULLETIN

OF THE

BRITISH ORNITHOLOGISTS' CLUB.

No. CCCCXIX.

The four-hundred-and-fourteenth Meeting of the Club was held in the Rembrandt Hotel, Thurloe Place, on Wednesday, January 11, 1939.

Chairman : Dr. A. Landsborough Thomson.

Members present :—Miss C. Acland ; W. B. Alexander ; Dr. D. A. Bannerman ; Miss P. Barclay-Smith ; F. J. F. Barrington ; A. W. Boyd ; Hon. G. Charteris (*Vice-Chairman*) ; Miss J. M. Ferrier ; J. Fisher ; Miss E. M. Godman ; Capt. C. H. B. Grant (*Editor*) ; Rev. James Hale ; B. G. Harrison ; R. E. Heath ; J. E. Hodgkin ; Rev. F. C. R. Jourdain ; Miss E. P. Leach ; Miss C. Longfield ; J. H. McNeile ; G. M. Mathews ; Col. R. Meinertzhagen ; J. H. Newman ; C. Oldham ; H. Leyborne Popham ; C. W. Mackworth-Praed ; Miss G. Rhodes ; W. L. Sclater ; D. Seth-Smith ; Col. R. Sparrow ; Mrs. I. Steuart ; C. R. Stonor (*Secretary*) ; B. W. Tucker ; Mrs. A. Boyd Watt ; H. F. Witherby.

Guests :—Col. F. Bailey ; J. A. Barnes ; Miss Theresa Clay ; G. F. Coulton ; Dr. C. Hellmayr ; Miss C. James ; M. F. Meiklejohn ; Miss A. Meinertzhagen ; D. Meinertzhagen ; B. Payn ; Mrs. W. L. Sclater ; P. M. Thomas.

Guest of the Club :—Dr. C. C. Sanborn.

Members present 35 ; Guests 12 ; Guests of the Club 1.

A new Coot from Peru.

Mr. Alastair Morrison described a new Coot from Peru as follows :—

Fulica americana peruviana, subsp. nov.

Description.—Nearest to *F. americana columbiana* Chapman, but larger, with longer bill and larger frontal plate ; without any red at the base of the tarsus ; inner secondaries but rarely with apical markings of white. Wing 210–230, bill (from anterior edge of shield) 34–40 mm.

Distribution.—Temperate zone of the Andes from Ecuador to northern Chile (provinces of Tarapacá and Antofagasta) and north-western Argentina (Los Andes).

Type.—Adult female, Lake Junín, Junín, Peru, March 21, 1938. Collected by A. Morrison, no. 495.

Remarks.—Mr. Morrison remarked that during his visit to Peru he found two species of Coot breeding on Lake Junín, which were evidently quite distinct. One had rather a knob-like, protuberant, mahogany-red to bright chestnut frontal plate, a parti-coloured bill, and green legs, while the other one, which was far more numerous, though agreeing in size and coloration of plumage, had slate-grey legs and the bill, as well as the larger and flatter frontal shield, white or pale primrose-yellow. Morrison added that during his stay on the lake he had dozens of specimens through his hands, for the natives killed them for eating purposes, and he was using them as food for his live Ibises and Gulls.

He found the above characters quite constant in all of the many specimens examined, and as the two species were breeding at the time of his visit, he could not but reject the theory advanced by Sclater and Salvin (P. Z. S. 1868, pp. 176, 464) that the red frontal plate was merely a sign of the nuptial plumage. Mr. Morrison, furthermore, pointed out that while the shield of the white-fronted bird after death faded to yellowish or isabella colour, the red plate of the other species did not undergo any change, specimens in the Museum collection for seventy years still showing the same chestnut tone as his freshly-killed birds.

Mr. C. E. Hellmayr, in exhibiting specimens of the new Coot and its relatives, stated that for many years he had been aware of the variation in the frontal plate of *F. ardesiaca* without being able to offer any plausible explanation. After carefully studying large series from the Andean region he was now inclined to agree with Mr. Morrison in admitting two species. The white-fronted and the red-fronted birds breed side by side in suitable places in Ecuador (Lake Yaguarcocha, Colta) and Peru (Lake Junín). The white-fronted bird, however, did not apparently range beyond Peru, since all of the numerous specimens seen by him from Bolivia, Chile, and Argentina were of the red-fronted species. He also added that, thanks to the courtesy of Prof. O. Fuhrmann, who most obligingly sent the type from the Museum at Neuchâtel, Switzerland, he was enabled to ascertain that *F. ardesiaca* Tschudi referred to the white-fronted species. The red-fronted bird he considered as nearly related to *F. americana columbiana* of the Colombian Andes, but distinguishable by the characters indicated by the describer. The present form has been fully described by Hartlaub (J. f. O. 1853, Extra-Heft, p. 81) from Bolivian specimens in the Paris Museum as F. *chilensis* "Desmurs," but the bird figured by Gay (Hist. Fis. Pol. Chile, Atlas, pl. 10, 1848), and later described by Des Murs (in Gay, Hist. Fis. Chile, Zool. viii. 1854, p. 474) under that name, was clearly the common Chilean Coot, *F. armillata*.

A new Species of Paradise Bird of the Genus Astrapia.

Mr. C. R. Stonor exhibited and described :—

Astrapia mayeri, sp. nov.

Description.—Known only from two central rectrices, three other rectrices, two secondaries, and one greater wing-covert of a male. The two central rectrices are 81·6 cm. in length, pure white for most of their length, and tipped with dark brown. The brown colour commences 3·5 cm. from the tip, and the transition from it to the white of the rest of the feather is abrupt. The terminal 11 cm. of the shaft is brown, as is

also a very narrow strip of the vane on each side of it. These two feathers are sharply pointed, and the vane is extremely narrow relative to the total length, giving them a ribbon-like appearance ; the average width is about 2·2 cm. The total length is slightly greater than the figure given, as they had been broken off above the point of the quill.

The other three rectrices are 12, 10, and 7·5 cm. in length, sharply pointed, and dark brown in colour. There is evidently a very great disproportion between the two central feathers and the rest of the tail. The secondaries and greater wing-covert are dark brown, spangled with purple on the upper surface, as in the males of many Paradise Birds.

Distribution.—At present rests on two field-records : from the vicinity of Mt. Champion on the northern border of Papua ; and eighty to a hundred miles west of Mt. Hagen in the Mandated Territory.

Type.—In British Museum (Natural History). Feathers taken by a missionary from the head-dress of a native on Mt. Hagen, North-East New Guinea (see below).

Type-locality.—Vicinity of Mt. Champion ; where first observed by Hides.

Remarks.—The history of this remarkable bird is well told in a letter from Mr. F. Shaw Mayer, written at Singapore on December 16, 1938. He says : " I am sending you two tail-feathers of a new Bird of Paradise (*Astrapia* ?). Briefly the history of the white-tailed bird ; the first mention of a new Bird of Paradise, is in the late J. G. Hides's book ' Papuan Wonderland ' published 1936 ; on p. 106 : 'As I stood in the branches of this tree gazing at the rock and heather-covered summit of the peaks in front of me, I noticed pairs of an interesting species of paradise birds flitting through the moss-covered branches of the trees around me. The males had two long ivory-white feathers as a tail, with which they made flicking noises as they trailed the plumes after them through the air. I did not know the species, so for the information of our ornithological department, I instructed one of the police to shoot a male bird, remove the tail-feathers, and carefully pack them away.' "

Mr. Shaw Mayer continues : " On this expedition Mr. Hides was accompanied by Mr. O'Malley, a patrol officer. In December of last year I met Mr. O'Malley and questioned him about the birds.

" He remembered them quite well, and described the bird as being black in some lights and showing colours in others. Very true of the *Astrapias*. I was able to show him my live Princess Stephanie's (*A. stephaniæ*), and he agreed they were very like these birds, only the body was a little smaller and, of course, had the two long white tail-feathers. He could not tell me what happened to the two feathers they brought back. He said the beak was short and not long like that of my live *Epimachus*. In May of this year I had a long talk with the Fox brothers, two New Guinea miners, who also made a remarkable journey of some hundreds of miles through the wild country west of Mt. Hagen.

" They remembered meeting the white-tails well, some eighty to a hundred miles west of Mt. Hagen. The natives of that part wore the tail-feathers in their hair.

" The Fox brothers memories were better, as they thought these feathers had a black tip. They described the bird much as O'Malley did, and remarked about the flicking of the tail-feathers. They brought nothing back, but thought one of their boys might have saved a feather or two from a native's head. However, nothing turned up.

" In the middle of last August I was given by a missionary the two tail-feathers I am sending you. They were taken out of the hair on the head of a Mt. Hagen native. The bird is *not* found though in the Mt. Hagen district, but about eighty to a hundred miles west of it. It was a very great joy to see the feathers. I was surprised to find them so narrow. . . . I give the feathers to the Museum quite freely."

Affinities.—As Mr. Shaw Mayer suggests, there seems no doubt that this most interesting discovery belongs to the genus *Astrapia*. In the extraordinary length of the two central tail-feathers it comes nearest to *A. stephaniæ* of Eastern New Guinea ; and from the relative shortness of the three other tail-feathers it is quite clear that it also resembles it in the

excessive lengthening of the two central feathers in relation to the rest of the tail; in the other three species of the genus although the tail is very long, it is evenly and regularly graduated. Although the bird is described as smaller than *A. stephaniæ*, the two feathers sent are 16·3 cm. longer than the average of three males of the latter species.

The coloration approximates very closely to the small *A. splendidissima*, wherein the two central rectrices have just the same pattern of white, tipped with dark brown. A suspicion of this is to be seen in *A. stephaniæ*, where the proximal section of the feather-shaft is white, while the rest is dark as in *A. nigra* and *A. rothschildi*.

The two long feathers are quite unique by virtue of their extreme narrowness described above. This condition is quite the reverse of what is found in three of the other four species, which have the tail-feathers unusually broad. In *A. splendidissima* the two central feathers are distinctly narrow for the greater part of their length, but broaden out into a rounded lobe near the tip. Presumably their extraordinary form in the new species is connected with the display of the males.

It would appear, therefore, that the new bird is from the same stock as *A. stephaniæ* and *A. splendidissima*, and this is borne out by the distribution as at present known, for the former species is found to the east, while *splendidissima* replaces it to the west.

It is just possible that the new bird may be the male of *Astrapia stephaniæ feminina*, described by Neumann from females and an immature male in 1922; and which was taken about a hundred and twenty miles to the north-west of Mount Champion. But in *A. splendidissima*, the other member of the genus with white on the tail, this character is in *both* sexes: and since the male of the new species has considerably more white than *splendidissima*, it is hardly likely that the female has none at all, as is evidently the case with *feminina*, from Neumann's description. I consider that (as already suggested by Dr. Stresemann, Archiv f. Naturgesch. lxxxix. 1924). Neumann's bird will probably prove to be the female of another new species, the male of which is as yet undiscovered.

In view of the trouble he has taken to establish its existence, and as a slight recognition of the efforts he has made during the past few years to add to our knowledge of the family as a whole, it is a pleasure to name this most striking new bird after its discoverer, *Astrapia mayeri*, Shaw Mayer's Bird of Paradise.

The Sulphur- and White-breasted Toucan (Ramphastos vitellinus) in the nesting-cavity.

Mr. B. G. Harrison exhibited a photograph of a Toucan, and made the following remarks :—

This photograph was taken last March in the neighbourhood of Mount Harris, Trinidad, B.W.I., by Mr. Ernest Chenery of the Imperial College of Tropical Agriculture. The nesting-hole was at an altitude of some seventy feet, and as the tree had no low branches, the only method of reaching the site was by means of transverse wooden slats nailed to the trunk.

This Toucan usually nests at a considerable altitude and must consequently present considerable difficulty to the photographer. I am not aware of any previous photograph of this species at its nesting-site.

Birds of Morocco.

Colonel Meinertzhagen showed some excellent slides and remarked :—

On a recent trip in Morocco, when the Great Moroccan Atlas was visited at three points and subsequently the Anti Atlas was crossed and a trip made as far south as Goulimine, near the Rio d'Oro, the Sous Valley was explored and the Moroccan Sahara visited as far as Erfoud and Ksar es Souk. The Atlas was again crossed, and Azrou was visited during a snow period. Search for the scarce Guinea Fowl was made at Oulmes in the steep valleys, but it is almost extinct. The account of the trip was illustrated by lantern-slides.

Some twenty species new to Morocco were recorded, besides a new species of *Sylvia* and several new forms. Series of Moroccan birds in fresh plumage, which have never before existed, were brought back.

The trip has raised several problems. Seebohm's Wheatear was absent from its breeding quarters from the second week in October. Where does it go, and does it moult into a plumage resembling that of the European Wheatear, moulting back into a black throat in spring? No winter specimens are known, and surely, if it had a black throat in winter, specimens would have been obtained from its winter quarters, wherever that may be?

Secondly, the winter plumage of the Moroccan Pied Wagtail is unknown, and is probably so near to that of the abundant *Motacilla alba alba* in winter as to preclude identification in the field.

One of the main objects of the trip was to collect further evidence regarding the effect of environment on density of pigment in plumage and the reason of desert coloration. As the matter stands at present it seems that two main influences work on plumage, humidity or lack of humidity in the atmosphere restricting the ultra-violet rays of the sun and producing darkness where there is a small percentage of rays filtering through the air and paler plumage where a large percentage of these rays get through.

The second factor is a direct chemical relationship between the red pigment in the soil and the red pigment in the feather. If it is conceded that the feather, once grown to maturity, is dead as far as connection with the body is concerned, then the only season when the colour of the feather is determined in so far as the degree of red is concerned, is during the season of moult. It is now believed that the red pigment is eaten by the bird either by direct pieces of soil or grit, through herbage or through insects, and that this pigment is absorbed into the system and finds a place in deposits of fat on the feather-tracts. These tracts feed the growing feather, which absorbs the red pigment from the fat. This is merely an unproven theory and is given for what it is worth. Evidence similar to this (in part) was obtained by Ticehurst and Whistler (Ibis, 1938, p. 731).

There is a further interesting fact connected with this subject, and tending to prove that colour pigment in fat has a direct bearing on red and yellow colour in plumage. Among

those birds which have red, orange, or yellow as a definite part of the colour-pattern of plumage, legs, or bill, there is, as far as our experience shows, a definite red, orange, or yellow pigment in the feather-tract fat. A few instances are *Pyrrhocorax pyrrhocorax*, *Erythrospiza*, *Tringa totanus*, *Ammomanes deserti payni*, *Loxia* (males and females), *Pinicola*, *Molpastes* (even those such as *M. b. barbatus*, which has little or no yellow), and hundreds of others. It is also noteworthy that such desert birds which do not react to desert coloration (*Corvus corax*, *Œnanthe leucura*, *lugens*, etc.) have no trace of red colour in their fat, it being a dirty white.

Elaboration of these theories will appear at a later date.

New Species and Races from Morocco.

Col. Meinertzhagen also exhibited and described the following new species and twelve new races :—

Melierax metabates theresæ, subsp. nov.

Description.—As *M. m. metabates*, but darker above and below. As dark above as *M. m. mechowi*, and agreeing with that form in every respect, but having the speckling on the outer web of the secondaries, a character entirely lacking in *M. mechowi*. The barring below is darker than in *M. m. metabates* owing to the black bars being broader and the white bars narrower.

Soft parts.—Iris dark brown, legs cornelian-red, bill cornelian-red with horn-black tips.

Distribution.—The Sous Valley, southern Morocco.

Type.—In my collection, adult male, near Auliouz, Eastern Sous, southern Morocco, 16. xi. 1938.

Measurements.—Wings of males 288–297 mm., and of females 315–323 mm.

Remarks.—Three adult males and three adult females were obtained, all from the Sous and all are in fresh plumage. The characters claimed for the race are constant throughout the series. There is, however, a single bird in the British Museum from Mongalla, therefore topotypic of *M. m. metabates*, which resembles this new race and is even darker. But

fifteen adults from the Sudan and twenty-two adults from Abyssinia have been examined, and in no other case is there any resemblance. The dark Mongalla bird is therefore treated as a rare exception, and need not be considered in judging the normal colour of *M. m. metabates*.

Erythrospiza githaginea theresæ, subsp. nov.

Description.—Much paler than *E. g. zedlitzi*. In fresh plumage the mantle is a pale grey-brown instead of a pale earth-brown. The underparts are also much paler, the rose on the lower abdomen and upper tail-coverts of the male being a delicate pale shell-pink instead of a definite rosy-pink.

Distribution.—Only known from the type-locality. Five of these very pale birds were shot from a small party on a stone wall surrounding some crops. Unfortunately only two were able to be preserved.

Type.—In my collection, adult male, Taznakht, Anti Atlas, Ouarzazate District, Morocco, 22. xi. 1938. In very fresh plumage.

Measurements.—Wings of male 88 mm., and of female 83 mm.

Remarks.—Compared with twenty-two specimens in the British Museum from Tunis and Algeria and a large series in my collection from Morocco, Algeria, and the Ahaggar Mountains, none of which approach this new form in paleness.

Alectoris barbara theresæ, subsp. nov.

Description.—Chocolate of crown very dark, much darker than in Tangier and Marrakesh birds or those from northern Algeria. Blue-grey of upper breast and chestnut of breast also darker.

Distribution.—Typical birds occur in the High Atlas. Birds slightly less typical, nearing *A. b. barbara*, occur in the Sous Valley around Taroudant.

Type.—Adult male, Taddert, High Atlas, Morocco, 6000 feet, 17. x. 1938.

Remarks.—The type-locality of *A. b. barbara* is on the Atlantic Coast of Morocco, a spot referred to by the ubiquitous

name of Santa Cruz. Birds from Tangier and the coast near Mogador are *A. b. barbara*, and cannot be distinguished from North Algerian specimens.

Scotocerca inquieta theresæ, subsp. nov.

Description.—Very similar to *S. i. grisea* Bates from Arabia, but with much slenderer, finer bill and with narrower dark shaft-streaking on the crown. Much darker than *S. i. saharæ*. Considerably darker than either *S. i. inquieta* or *S. i. striata*, but not so dark as *S. i. buryi* nor with the latter's heavy bill.

Distribution.—The stony deserts of southern Morocco (Ouarzazate and Izakarm Districts).

Type.—In my collection, male, stony desert near Izakarm, Moroccan Sahara, 5. xi. 1938.

Remarks.—Five obtained, wings 45–47 mm., culmen from base, 10·5–11 mm.

Galerida theklæ theresæ, subsp. nov.

Description.—Nearest to *G. t. ruficolor*, but generally more rufescent and inclining to isabelline on the upper parts. Considerably browner than *G. t. carolinæ*.

Distribution.—The Anti Atlas Mountains, the Tiznit Plain, south to Izakarm and occasional north to Agadir and probably the southern slopes of the Great Atlas.

Type.—In my collection, adult male, Anti Atlas Mts., 30 km. south of Tiznit, southern Morocco, 5. xi. 1938.

Remarks.—The type of *Galerida theklæ ruficolor* (Ibis, 1898, p. 603) came from "Central and Southern Morocco." Dodson, who collected it, returned with a large series of *G. theklæ*, and though no type was made at the time, it probably came from Marrakesh, Mogador, or Meknes. It was said to differ from Spanish *G. t. theklæ* in being of a "paler and more rufous colour, without, however, being at all isabelline."

My Moroccan series is not quite uniform, as is usual with any series of ground-feeding birds taken from widely distributed areas. The amount of rufous and isabelline varies individually and not always with locality.

Coccothraustes coccothraustes theresæ, subsp. nov.

Description.—Differs from *C. c. buvryi* in having the mantle less chocolate, more blackish-brown, and therefore darker. Underparts darker. Mantle as dark as in the European form, *C. c. coccothraustes*, but of a different shade, the latter being a rich chocolate.

Distribution.—Only known from the type-locality. Birds from Azrou are typical *C. c. buvryi*.

Type.—In my collection, adult male, Taddert, Great Atlas, Morocco, 16. x. 1938. Head moult incomplete. First and second primaries in quill. Otherwise in fresh plumage.

Remarks.—One adult male and four adult females examined. Wings of females 95–101 mm.

Riparia rupestris theresæ, subsp. nov.

Description.—Considerably darker than other South European and North African specimens examined (46 in all). Crown of head blackish-brown as opposed to hair-brown, mantle a blacker brown and not so pale as in *R. r. rupestris*. Underparts, especially abdomen, distinctly darker.

Distribution.—Two males obtained at Amerzgane on the southern slopes of the Great Atlas in the Ouarzazate District and a female obtained at Tzi n'Test at 6300 feet in the Great Atlas.

Type.—In my collection, adult female, Tizi n'Test, High Atlas, Morocco, 6300 feet, 19. xi. 1938. Body and wing in moult.

Measurements.—Wings of two males 128 and 132 mm., and of one female 125·5 mm.

Œnanthe mœsta theresæ, subsp. nov.

Description.—Compared with Algerian specimens in fresh autumn plumage the males are darker and purer dead black on the mantle, crown darker smoke, and under tail-coverts a darker russet. The females are darker and browner above, not so russet or so red on the crown. Throat smoky.

Distribution.—Only known so far from the Tiznit Plain in S.W. Morocco.

Type.—In my collection, adult male, near Tiznit, S.W. Morocco, 7. xi. 1938.

Measurements.—Wings of seven Moroccan males 91–95 mm., culmen from base 19·5–20·5 mm., and of two females 88–90 mm., culmen 19 mm.

Remarks.—Through the kindness of Messrs. Ticehurst and Whistler, I have been able to examine six males and three females of *O. m. mœsta* from near Laghouat shot in October last year.

Turdus viscivorus theresæ, subsp. nov.

Description.—As *T. v. deichleri*, but darker on the mantle, in fact, as dark as the darkest British specimens, but grey, not so yellow.

Distribution.—Middle Atlas at Oulmes and Azrou, and probably in the Great Atlas.

Type.—In my collection, male, Oulmes, Middle Atlas, Morocco, 7. xii. 1938.

Measurements.—Wings of three males 150, 155, 158 mm., culmen from base 20–24 mm., and wing of a single female 150, culmen 23·5 mm.

Remarks.—In addition to the material in my collection I find that three April, June, and July birds from Azrou (in the British Museum) are all darker than a single Tunisian March bird which is not in very worn plumage.

I have also, through the kindness of Dr. Ticehurst, seen a fresh plumaged male from Djelfa (Algeria) which matches Tunisian specimens and is a pale grey compared to this new form.

Garrulus glandarius theresæ, subsp. nov.

Description.—Below, a distinct shade paler and less vinous than topotypical *G. g. œnops*. Upper parts as in *G. g. œnops*, but the crown varies from being similar to that of *G. g. œnops* to an unstreaked black. Also larger, wings of four measuring 165, 170, 172, and 178, culmen from base 29, 29, 29·5, and

30 mm., as opposed to wings not exceeding 71 mm. in *G. g. œnops* and sometimes as low as 155 mm., and culmen varying from 28 to 29·5 mm.

Differs from *G. g. whitakeri* from Tangiers in being darker above, less white on crown, and smaller.

A male and two females collected by Ticehurst near Djelfa in autumn 1937 agree with this form, but are small, wings 161–165 mm., therefore well within the size of *G. g. œnops*, but not dark enough below.

Distribution.—The Middle Atlas about Azrou.

Type.—In my collection, adult female, Azrou, Middle Atlas, Morocco, 4. xii. 1938.

Measurements.—Wing 165 mm., culmen from base 30 mm.

Remarks.—I have also examined two males and a female collected by Lynes at Azrou in June 1919. A male and a female obtained by us at Oulmes, also Middle Atlas, are identical with *G. g. whitakeri*, but have even more white on the crown, wings 165, 166 mm., culmen from base 30, 32 mm., therefore not nearly large enough for *G. g. whitakeri*, whose wings vary from 176 to 190 mm. (four measured) and culmen 30 to 35 mm. It may be that *Garrulus minor* Verr. (1857—Djelfa, Algeria), unfortunately preoccupied, is the same as this form, but Djelfa birds seem to be consistently smaller.

Emberiza striolata theresæ, subsp. nov.

Description.—In the adult males, a much deeper chestnut below and darker above than specimens from Tunis, Algeria, and northern Morocco. I have not examined adult females in fresh plumage.

Distribution—Probably the Anti Atlas and country immediately south of it, and the Sous Valley.

Type.—In my collection. Adult male. Andja, S.W. Morocco, 5. xi. 1938.

Remarks.—Four males examined from Andja, Agadir, and the River Sous. Wings 75–79 mm. Compared with a large series of Algerian and Tunisian birds in winter and spring plumage. Dr. Ticehurst kindly compared my specimens with three autumn specimens from Algeria and finds the former darker.

Argya fulva billypayni, subsp. nov.

Description.—Darker above than *A. f. fulva*, crown as dark as in *A. f. maroccana*, but mantle intermediate between that form and *A. f. fulva* and lacking the distinct blackish shaft-stripes. Tail much paler than in *A. f. maroccana*, underparts darker than *A. f. fulva*, and about the same as in *A. f. maroccana*.

Distribution.—Only known from the type-locality.

Type.—In my collection, male, Ksar es Souk, S.E. Morocco, 26. xi. 1938.

Remarks.—Two obtained: wing of male 94 mm., wing of female 94 mm.

Sylvia ticehursti, sp. nov.

Description.—A small *Sylvia* of about the size of *Sylvia cantillans*, but with whole crown and mantle pale sandy-brown, yellower than in *Sylvia n. nana*, but neither so isabelline nor so pale as in *Sylvia nana deserti*; but the impression of the bird is a distinct desert coloration all over. Wings dark brown, secondaries broadly fringed with colour of mantle. Tail dark brown with ragged pale fringes. No white in tail. Underparts very pale buff. Ear-coverts pale hair-brown. A white feather-ring round the eye, and a white streak from the lores to behind the eye.

Soft parts.—Legs pale biscuit-yellow, upper mandible dark horn, lower mandible pale yellowish-horn. Iris pale brown.

Measurements.—Wing 54·5 mm., tail long for size of bird—58 mm. First primary reaches to 4 mm. beyond primary coverts, second primary is 3 mm. short of the third, and the third to sixth are equal. The specimen is in very fresh plumage, having just completed its moult.

Distribution.—Unique specimen. Found in desert scrub with *Sylvia conspicillata* and *Sylvia deserticolor*.

Type.—In my collection, female, Tinghir, Ouarzazate District, Moroccan Sahara, 24. xi. 1938.

A new Race of the Moorhen from Scotland.

Mr. P. A. Clancey sent the following description :—

An examination of a long series of freshly moulted autumn

Moorhens from west and north Scotland has shown that the birds inhabiting this region are to be distinguished readily from those from England ; the restricted typical locality of *Gallinula chloropus* (L.). A sufficiency of breeding specimens has also been compared from both the regions cited above, while Continental material has been freely consulted. As the Scottish bird is so obviously distinct, it should be characterized as a new race, and, therefore, I propose the following name :

Gallinula chloropus vestigialis, subsp. nov.

Description.—Differs at once from *Gallinula chloropus chloropus* (L.) in being a considerably darker and bluer grey on the under surfaces ; whole of head, including nape and throat, more intense black ; primaries somewhat darker. Upper parts frequently darker, but not constantly so, and this would not appear to be a reliable characteristic.

Distribution as at present known.—Specimens have been examined from the following counties : Ayrshire, Renfrewshire, Lanarkshire, Dumbartonshire, Stirlingshire, and Sutherlandshire. In all probability this race will be found to be the breeding form throughout the whole of west and north Scotland, including the Outer and Inner Hebrides.

Type.—Female. Not moulting. Very fat. Near Bardowie, Stirlingshire, Scotland, October 29, 1938. In my collection. Wing 169 mm.

Co-type.—Male. Slight moult. Fat. Near Bardowie, Stirlingshire, Scotland, December 24, 1938. In collection of Dr. C. B. Ticehurst. Wing 184 mm.

Remarks.—No perceptible difference in measurements. I cannot conclude this note without thanking both Dr. C. B. Ticehurst and Mr. N. B. Kinnear for their invaluable assistance and advice.

A new Jay from the Balkans.

Dr. Andrew Kleiner sent the following description :—

By the kindness of Messrs. P. Zervas and H. Th. Ziogas and the Forest Office of Sparta and Chalcis, I have received five Jays from Greece. The Jay of Greece is

different from the nominate form by the darker grey back, the more whitish underparts, and the average smaller size, and the black streaks on the head are larger. In appearance this Jay is very closely allied to *G. g. cretorum* Meinertzhagen, having also a dark back. The underparts are similar to *G. g. albipectus* Kleinschm., which race lives in the West Balkans.

I noticed this bird in my paper in 'Aquila,' 1935/38, p. 200, but at that time I had only one specimen—and one from Crete, but the new material from Sparta (1) and Chalcis (2) leads me to separate this race as follows :—

Garrulus glandarius græcus, subsp. nov.

Description.—*G. g. cretorum* similis, cum forte tergo griseo, sed ventre albicante, lucidiore. Lineæ nigræ capitis latiores. Probabiliter minor *G. g. glandarii*. Habitat in Græcia.

Distribution.—The distribution of this new race is not well known. We hope that the trip of Dr. Jordans to S. Bulgaria will help to clear up this point.

Type.—In collectione Instituti Regii Hungarici Ornithologici, no. 3345, Sparta, Taygetos, 10. ii. 1937. Sex ?

Measurements.—Sparta : wing 180, 188 ; tail 159, 160 ; bill 28, 31 ; tarsus 41, 44 mm. Chalcis : wing 174, 174 ; tail 153, 150 ; bill 31, 30 ; tarsus 42, 43 mm.

Remarks.—Material : Sparta, sex ? 10. ii. 1937, 7. iii. 1938 ; Chalcis, sex ? 15. i. 1938.

Notes on East African Birds.

Capt. C. H. B. Grant and Mr. C. W. Mackworth-Praed sent the following five notes :—

(1) On the Races of *Campethera cailliautii* (Malherbe).

Sclater, Syst. Av. Æthiop. i. 1924, p. 295, recognizes three races. Claude Grant, Ibis, 1915, p. 455, expressed the opinion that more material might show that *C. nyanzæ* would have to become a synonym of *C. cailliautii*. Van Someren, Nov. Zool. xxix. 1922, p. 64, recognizes three races.

Our careful examination of the good series in the British Museum collection clearly shows that there is an appreciable

amount of individual variation, and that only two races are really recognizable, as follows :—

Campethera cailliautii cailliautii (Malh.).

Chrysopicos cailliautii Malherbe, Rev. Mag. Zool. 1849, p. 540 : Mombasa, south-eastern Kenya Colony ; of which *Dendromus malherbei nyanzea* Neumann, J. f. O. 1900, p. 204 : Mwanza, south end of Lake Victoria, Tanganyika Territory ; and *Campethera loveridgei* Hartert, Bull. B. O. C. xl. 1920, p. 139 : Morogoro, Tanganyika Territory, are synonyms.

Upper parts warmer in tone, inclining to golden or mossy green.

Distribution.—Southern Kenya Colony to Tanganyika Territory (except south-west) and Portuguese East Africa, as far south as Namapa, Lurio River.

Campethera cailliautii fulleborni (Neum.).

Dendromus malherbei fulleborni Neumann, J. f. O. 1900, p. 204 : Tukuyu, south-western Tanganyika Territory.

Upper parts colder in tone, inclining to olivaceous.

Distribution.—Portuguese East Africa from Beira to Ribaue (Mozambique), eastern Southern Rhodesia, Northern Rhodesia, southern Belgian Congo, Nyasaland, and south-western Tanganyika Territory (Ufipa and southern Kigoma Districts).

(2) On the Type-locality of *Jynx ruficollis* Wagler, Nat. Syst. Amph. 1830, p. 118.

Wagler (footnote i.) states that the type-specimen was collected by Krebs in Kaffernlande. We are unable to find any publication covering Krebs's collections from South Africa, or where he actually travelled. Reichenow, Vög. Afr. i. 1900, p. lix. no. 500, gives a reference to Verz. Samml. Sudafr. Nat. 18 August, 1834, Zool. Mus. Universität. Berlin, 1834 (preface by H. Lichtenstein), and gives in brackets Sammlung von Krebs.

In this Catalogue there is nothing to show that the specimens enumerated were collected by Krebs, and no localities are given except Kafferlandes in the Preface.

As the generally accepted meaning of old Kaffirland was in

eastern Cape Province, we propose to fix the type-locality of *Jynx ruficollis* Wagl. as Eastern Cape Province, South Africa.

(3) On the Type-locality of *Jynx ruficollis æquatorialis* Rüppell, Mus. Senck. iii. 1842, p. 121.

Southern Abyssinia is the usual locality quoted by most authors, and Rüppell gives southern Provinces of Abyssinia. Neither in his work Reise. Abyss. 1834, nor in the map in his Atlas 1840, does he give any indication of what he meant by this term, and he himself only travelled in northern Abyssinia as far west as the east shores of Lake Tana.

Under date July 29, 1938, Dr. Mertens kindly informs us that the specimen no. 1968 in the Natur-Museum Senckenberg is undoubtedly the type ; and although there is nothing to show who collected it, the original label having disappeared, it certainly was not collected by Rüppell, and therefore Rüppell's statement in the introduction to Mus. Senck. iii. 1842, p. 119, that the birds described therein were obtained on his travels is not correct. Rüppell's southern provinces of Abyssinia can only refer to that part of old Abyssinia covering Shoa and the adjacent provinces, and we therefore propose to fix the type-locality of *Jynx ruficollis æquatorialis* Rüpp. as Shoa, central Abyssinia.

(4) On the Type-locality and distribution of *Jynx ruficollis pulchricollis* Hartlaub, Ibis, 1884, p. 28, pl. 111.

Sclater, Syst. Av. Æthiop. 1924, p. 304, gives Barbira, White Nile, and distribution Upper Nile, east of Bahr-el-Gebel (only known from the type) ; and Sclater & Praed, Ibis, 1919, p. 634, give Babira, east of Bahr-el-Gebel (in the Mongalla Province of the Sudan or possibly in the Nile Province of Uganda). The Map in Mit Emin Pascha in Herz von Afrika, 1893 (Stühlmans) shows that Babira is on the Bahr-el-Gebel, about 15 miles south of Wadelai, north-western Uganda.

Through the kindness of Dr. Stresemann, of the Berlin Museum, we have had the loan of an adult male and female collected by Emin Pascha at Buguera, near Wadelai, on March 13 and March 7, 1889. Other specimens have been

recorded from Bozum, Upper Kemo River, and Alima River in French Equatorial Africa, and from Ibba, in the southern Sudan.

The distribution of *Jynx ruficollis pulchricollis* is :—French Middle Congo to north-western Uganda and south-western Sudan.

(5) On the Status of *Jynx ruficollis cosensi* C. Grant, Bull. B. O. C. xxxv. 1915, p. 102 : Amala River, south-western Kenya Colony.

Claude Grant in ' The Ibis,' 1915, p. 471, gives wing measurement for *J. r. cosensi* 94–101 mm. and for *J. r. ruficollis* Wagl. Nat. Syst. Amph. 1830, p. 118 : eastern Cape Province, 90–95 mm. : but since that date many more specimens have been collected. The twenty-five specimens of *J. r. ruficollis* in the British Museum collection measure 85–96 mm., and Dr. Austin Roberts has sent us measurements of twenty, *i. e.*, 89–96 mm., and Mr. Fuggles Couchman's Morogoro specimen is 93 mm. The eleven specimens of *J. r. cosensi* in the British Museum collection measure 90–100 mm., Dr. van Someren has sent us measurements of eight, *i. e.*, 95–99 mm., and Granvik, Rev. Zool. Bot. Afr. xxv. 1934, p. 57, gives one male 94 and two females 94–97 mm. These measurements, *J. r. ruficollis* 85–96 mm. and *J. r. cosensi* 90–100 mm., show an overlap and do not support the character given by C. Grant for *J. r. cosensi*. Since 1915 this Wryneck has been found at Marandellas, southern Rhodesia ; Ncheu, western Nyasaland ; Morogoro (Ngerengere River), Bukoba (Ihangiro), and Mwanza (Loliondo) Districts, Tanganyika Territory ; and Kigezi, south-west Uganda. Therefore *Jynx ruficollis cosensi* C. Grant becomes a synonym of *Jynx ruficollis ruficollis* Wagler, the distribution of which is :—South Africa to the Congo mouth on the west ; and to south-western Uganda and Kenya Colony on the east.

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BULLETIN

OF THE

BRITISH ORNITHOLOGISTS' CLUB.

No. CCCCXX.

The four-hundred-and-fifteenth Meeting of the Club was held in the Rembrandt Hotel, Thurloe Place, on Wednesday, February 8, 1939.

Chairman : Dr. A. Landsborough Thomson.

Members present :—Dr. D. A. Bannerman ; Dr. P. Manson Bahr ; Miss P. Barclay-Smith ; F. J. Barrington ; Miss M. G. Best ; Hon. G. Charteris (*Vice-Chairman*) ; Col. Stephenson Clarke ; H. Cleave ; Dr. J. M. Harrison ; Mrs. T. E. Hodgkin ; P. A. D. Hollom ; Rev. F. C. R. Jourdain ; N. B. Kinnear ; Miss E. P. Leach ; Miss C. Longfield ; Dr. G. Carmichael Low (*Vice-Chairman*) ; Dr. P. R. Lowe ; C. W. Mackworth-Praed ; J. H. McNeile ; H. A. Magrath ; G. M. Mathews ; J. Mavrogordato ; C. A. Norris ; C. Oldham ; B. B. Osmaston ; Mrs. Priestley ; W. L. Sclater ; D. Seth-Smith ; C. R. Stonor (*Hon. Sec.*) ; B. W. Tucker ; Mrs. Boyd Watt ; H. Whistler ; H. F. Witherby ; C. de Worms.

Guests :—Miss C. Hurcomb ; Dr. C. E. Hellmayr ; Mr. R. Holland ; Miss Lynes ; Mrs. Mackworth-Praed ; C. Pease ; Miss Frances Pitt ; D. W. Seth-Smith ; Miss R. Warren.

Members present 35 ; Guests 9.

A new Race of the Indian Bush-Quail.

Mr. Hugh Whistler exhibited specimens of a new race of the Indian Bush-Quail which he proposed to name :—

Perdicula asiatica punjaubi, subsp. nov.

Description.—Differs from the typical race (Mahratta region, restricted to Poona) in its markedly paler coloration. In the adult male the upper parts are a paler more sandy brown with conspicuous pale barring on the rump, upper tail-coverts, and tail. The dark blotching on the scapulars and tertiaries is less extensive and conspicuous. The black bars of the lower plumage are, as a rule, narrower, and so do not appear quite so black.

In the adult female the upper plumage is similarly paler, and the dark blotching of the scapulars and tertiaries is less extensive.

First winter birds, and even the juvenile are similarly paler.

Distribution.—Punjab and United Provinces, N. India.

Type.—In the British Museum. Adult male, Ambala, Punjab, 1872. Hume Collection. Brit. Mus. Reg. no. 1889.5.10.597.

Remarks.—Mr. Whistler also exhibited specimens of the typical race and of the allied Rock Bush-Quail for comparison and made some remarks on the plumages of the two species.

A British Specimen of the Yellow-billed Cuckoo.

Mr. H. F. Witherby exhibited a Cornish specimen of the American Yellow-billed Cuckoo (*Coccyzus americanus americanus*). Particulars of this have appeared in ' British Birds,' vol. xxxii. 1938, p. 236.

A British Specimen of the Killdeer Plover and a Dunlin.

Mr. C. R. Stonor exhibited a female British-killed specimen of the Killdeer Plover (*Charadrius vociferus vociferus*), and a female Dunlin (*Calidris alpina alpina*) found dead in the grounds of the British Museum of Natural History, South Kensington, on December 20, 1938, during the unusually cold spell. The particulars of the Killdeer Plover will appear in ' British Birds.'

Visit to Fair Isle in 1938.

Mr. C. A. Norris, who last September spent a fortnight on Fair Isle with Mr. H. F. Witherby and Mr. P. A. D. Hollom, gave a short account of the island and the birds seen there.

A Little Bunting and an unusually marked Lanceolated Warbler obtained on the island were exhibited, together with a normal Lanceolated Warbler, and a Scarlet Grosbeak in the same plumage as the bird seen on the island.

The account was illustrated by two maps and a number of photographs.

Discussion.

Mr. Witherby said that he was "personally conducted" to Fair Isle by Mr. Hollom, who, with Mr. Norris, did all the work. He thought they had been exceptionally fortunate in seeing so many scarce birds in such a short time, especially as there were never more than quite small numbers of migrants going through. Under these conditions they found it possible to identify quite satisfactorily almost all the birds they saw, but great care was necessary, and doubtful birds had to be hunted up and put out of cover a number of times before their identity could be established with certainty. The Lanceolated Warbler was a notable exception, and had they not shot it they would never have known what it was. A number of other birds occur on Fair Isle which would be equally difficult, and an uncertain identification is useless. He wished to add his thanks to the islanders for their kindness in allowing them to hunt through the crops so constantly. Without this permission they would have seen little of great interest.

Mr. N. B. Kinnear and Mr. P. A. D. Hollom also made some remarks.

The Ornithological Stations of Rossitten and Heligoland.

Miss Phyllis Barclay-Smith gave an account of her visit, with Mr. C. I. Blackburne and Mr. Hugh Thompson, to the ornithological stations at Rossitten and Heligoland in September

1938, illustrated by slides from photographs by Dr. E. Schüz, Director of the Vogelwarte at Rossitten. She gave a description of the Kurische Nehrung, its general formation, vast dunes, forests, and the customs of the inhabitants. Miss Barclay-Smith also described the great masses of migrating birds and the opportunities of observing many different species at Rossitten, particularly of raptorial birds, and stressed the fact of the great tameness of migrating waders which made it possible to study them at very close quarters. She then showed slides and gave a general description of Heligoland, and concluded with a brief account of the work which is being carried on in the study of various aspects of migration under the direction of Professor Drost and Dr. Schüz at Heligoland and Rossitten respectively.

Discussion.

The Chairman said that he had visited both Heligoland and Rossitten in September 1908, revisiting the latter in October 1910. He had not been fortunate in seeing any very striking migration phenomena on Heligoland, but had seen enough to appreciate the advantages of the island as a place of observation. At that time there was no regular observational or ringing work in progress, as it was in the interval between Gätke's day and the establishment of the present Vogelwarte. At that time, also, the fortifications placed some restriction on visiting ornithologists.

He agreed that Rossitten was a place well worth visiting. It was interesting and attractive in many ways. If one went sufficiently late in the autumn, one had a chance of seeing diurnal migration on a vast scale. Witnessing a passage of Hooded Crows and other birds in enormous numbers had been one of his most memorable experiences.

BULLETIN

OF THE

BRITISH ORNITHOLOGISTS' CLUB.

24 APR 1939
PURCHASED

No. CCCCXXI.

THE four-hundred-and-sixteenth Meeting of the Club was held at the house of the Royal Geographical Society, Kensington Gore, S.W. 7, on Wednesday, March 8, 1939, preceded by a Dinner at the Rembrandt Hotel, Thurloe Place, S.W. 7, in conjunction with the Annual Dinner of the British Ornithologists' Union.

Dr. PERCY R. LOWE, the President of the B. O. U., took the Chair during the Dinner, and Dr. A. LANDSBOROUGH-THOMSON, Chairman of the Club, during the subsequent proceedings.

Members of the Union :—Lt.-Col. F. M. BAILEY ; Major R. S. P. BATES ; A. G. BENNETT ; Dr. J. BERRY ; C. G. BIRD ; Mrs. M. D. BRINDLEY ; H. G. CALKIN ; R. CHISLETT ; E. COHEN ; C. T. DALGETY ; R. PRESTON DONALDSON ; Lord FORESTER ; A. K. GIBBON ; ROLAND GREEN ; Dr. C. E. HELLMAYR ; Miss A. HIBBERT-WARE ; E. J. HOSKING ; T. C. JEFFREY ; Mrs. H. M. RAIT KERR ; Mrs. F. E. LEMON ; D. I. MOLTENO ; H. ST. J. B. PHILBY ; Miss FRANCES PITT ; Capt. H. MORREY SALMON ; Sir M. C. C. SETON ; Dr. F. G. SWAYNE ; I. M. THOMSON ; N. TRACY ; J. G. WILLIAMS.

Members of the Club :—Miss C. M. ACLAND ; Dr. D. A. BANNERMAN ; Miss P. BARCLAY-SMITH ; Mrs. R. G. BARNES ; F. J. F. BARRINGTON ; Miss M. G. S. BEST ; GEORGE BROWN ;

Dr. J. W. Campbell ; Miss B. A. Carter ; The Hon. Guy Charteris (*Vice-Chairman*) ; H. P. O. Cleave ; W. H. Dobie ; Miss J. M. Ferrier ; Capt. H. A. Gilbert ; Miss E. M. Godman ; Capt. C. H. B. Grant (*Editor*) ; Col. A. E. Hamerton ; R. E. Heath ; Mrs. T. E. Hodgkin ; P. A. D. Hollom ; Dr. K. Jordan ; The Rev. F. C. R. Jourdain ; Miss E. P. Leach ; Miss C. Longfield ; Dr. G. Carmichael Low (*Vice-Chairman*) ; Rear-Admiral H. Lynes ; T. H. McKittrick ; C. W. Mackworth-Praed ; Dr. P. H. Manson-Bahr ; G. M. Mathews ; Dr. W. N. May ; Mrs. D. Nicholls ; E. M. Nicholson ; B. B. Osmaston ; A. S. Phillips ; Mrs. M. Priestly ; Miss G. M. Rhodes ; W. L. Sclater ; D. Seth-Smith ; Major M. H. Simonds ; Major A. G. L. Sladen (*Hon. Treas.*) ; Mrs. R. Steuart ; C. R. Stonor (*Hon. Sec.*) ; The Marquess of Tavistock ; Miss D. L. Taylor ; B. W. Tucker ; W. E. Wait ; Mrs. H. W. Boyd Watt ; H. Whistler ; C. de Worms.

Guests of the Club :—Monsieur Léon Lippens and R. Atkinson.

Guests :—E. L. Arnold ; K. R. Ashby ; The Hon. Mrs. F. M. Bailey ; Mrs. D. A. Bannerman ; Mrs. R. S. P. Bates ; Herr H. Behlau ; The Hon. Mrs. J. Berry ; Mrs. M. Blackmore ; T. A. Bowring ; Mrs. D. Brindley ; Mr. and Mrs. H. G. Calkin ; Mrs. J. W. Campbell ; Miss E. Carter ; Mrs. R. Chislett ; Miss V. E. Claridge ; G. P. Coldstream ; A. D. Combey ; G. Cory-Wright ; F. L. C. Cowley-Brown ; Mrs. R. M. Craske ; C. E. Crompton ; Mrs. C. T. Dalgety ; Mrs. R. Preston Donaldson ; Mr. and Mrs. C. F. Edwin ; H. Farmar ; R. H. P. G. Ferrier ; P. Forester ; T. R. Garnett ; H. Gaster ; Mrs. H. A. Gilbert ; Miss C. E. Godman ; Miss L. P. Grant ; E. Grist ; G. R. S. Heathcote ; J. J. Hollom ; A. E. Housman ; Miss E. Hulse ; C. K. James ; R. C. James ; S. Jenyns ; Miss H. Jordan ; C. M. Leverine ; Mrs. G. Carmichael Low ; Mrs. P. R. Lowe ; Miss B. Lynes ; Mrs. C. W. Mackworth-Praed ; D. H. Manson-Bahr ; Mrs. P. Martin ; Mr. and Mrs. F. Murgatroyd ; A. Nicholls ; D. Murray-Rust ; C. Pease ; W. H. Perrett ; Miss P. Philby ; Mrs. A. S. Phillips ; Mrs. H. M. Salmon ;

Sir Leopold and Lady Savile ; Mrs. W. L. Sclater ; Mrs. D. Seth-Smith ; H. H. Seton ; Sir Henry Sharp ; Mrs. M. H. Simonds ; Mrs. A. G. L. Sladen ; Miss Sladen ; Miss D. Sligh ; Miss B. N. Solly ; A. H. Spicer ; Mrs. A. Landsborough Thomson ; Mrs. I. M. Thomson ; Mrs. B. W. Tucker ; Miss T. Wake ; E. C. Watt ; F. B. B. Weston ; The Hon. Mrs. H. Whistler ; Mrs. H. F. Witherby.

Members of the Union, 30 ; Members of the Club, 50 ; Guests of the Club, 2 ; Guests, 79 ; and three others ; Total 164.

Slides of East African Birds.

Monsieur Léon Lippens, who had made the journey to London from Brussels at the invitation of the Committee of the B. O. C., showed some beautiful photographs of East African Birds and made the following remarks :—

Before showing you a few slides, I would like to tell you shortly where the photos were taken, and also say a word or two concerning bird-life in the Eastern Congo.

All the photos you will see were taken near Lake Edward, which lies exactly on the Equator. Lengthwise, the lake is cut in two, one half belonging to the Uganda Protectorate, and the other to the Belgian Congo.

The part of Lake Edward belonging to the Belgian Congo is now entirely encompassed in the Albert National Park, where I had the privilege of being game-warden. This park is a wonderful zoological and botanical reserve created, as you know, at the instigation of our late King, Albert.

This National Park is favoured with a series of really unique sites, rarely to be met with in Africa in such a relatively small space.

It comprises the snowy summits of the Ruwenzori Range, the hot plains of Lake Edward, grazed by untold thousands of antelopes—not to speak of hippos, buffaloes, and elephants,—and the lovely northerly shores of Lake Kivu.

It has the only living volcanoes in Africa, and several extinct ones rising up to well over 13,000 feet. The famous Beringers Gorillas make their home and refuge on the slopes

of these mountains. I say famous, because there was a time, not so long ago, when all protectionist Europe and Africa seemed to ring out with the cry : " Make the world safe for the Gorilla."

But for a bird-lover, the nicest spot of all in the Albert National Park is undoubtedly Lake Edward itself. This lake is one of the richest in the world in the matter of fish, which attract a vast and varied multitude of aquatic birds on its shores and shallow waters.

The lake, one of the sources of the Nile, is the haunt of innumerable typical African birds such as Pelicans, Egrets, Ibises, Senegal Plovers, and so forth, but is also the winter quarters of Palæarctic migrants arriving there from Europe and Asia by way of the Nile.

There is also a perpetual coming and going of African migrants such as Marabouts, Storks, Plovers, Saddlebills, etc., arriving either from the Sudan, in the north, or Madagascar in the south-east.

This makes you understand there is an intensely busy bird-life to be seen near Lake Edward and that it opens to the ornithologist an extremely vast field of research, of which, up to now, very little is known.

There is so little known as yet, of the biology of many African birds, of their breeding habits, their migration, and their social associations.

May I remind you, for instance, of the strange fact that no one knows where such conspicuous birds as the countless Pelicans living on Lake Edward have their breeding place? It seems almost certain that it is not near the lake.

I will show you in a few minutes pictures of some banding experiments I had the opportunity of making on Lake Edward, and which gave me some interesting results. I am sure you will all agree with me how interesting it would be to have a permanent ornithological and bird-banding station somewhere in Central Africa. I commend this suggestion to British Ornithologists, who could carry it out so well.

Film of African Wild Life.

Miss Cynthia Longfield showed an interesting colour-film of African Wild Life, a special feature being the flocks of Flamingos on Lake Nakuru, Kenya Colony.

Grey Geese.

Dr. Berry showed slides and made the following remarks :—

In connection with the inquiry at present being made as to the distribution and status of British wildfowl, some confusion has been caused by mistaken identification of Grey Geese. As I have often found myself similarly mistaken, I have tried to illustrate some common causes of my own errors by a series of photographs.

I. *The Greylag.*—The Greylag is characterized by the conspicuous silver-grey of the fore-wing. Often the silvery "shoulder" can be seen even when the wing is folded, but frequently it is concealed by the flank-feathers. Other species are sometimes mistaken for the Greylag, as the light reflected off their wings at certain angles makes these appear silvery, although, in fact, they may be dark. Similarly, the plumage of birds which have just been in water appears much more silvery than when dry. The large head, which is paler than the neck and back, and the heavy yellow bill with its conspicuous white nail are useful aids to the identification of the Greylag.

II. *The White-fronted Goose.*—Grey Geese are at times reported as White-fronted because of white feathering round the base of the bill. It is important to remember that species other than the White-fronted may also exhibit this character, especially the so-called Yellow-billed race of the Bean-Goose, in which the white "front" may exceed a centimetre in breadth. Although the bills of these Geese may appear to be entirely yellow, the nail is amost invariably black, in contrast to the white nail of the White-fronted Geese. But a more important point is the absence of black feathers on the breasts of the Bean-Geese, whereas the breasts of adult White-fronted Geese usually are more or less heavily blotched or barred with black.

III. *The Pink-footed Goose.*—Occasionally the Pink-footed Goose is confused with the Bean Geese. Here the small, rounded head and very short bill of the former differ noticeably from the larger, more elongated head and longer bill of the latter. Usually the head and neck of the Pink-footed Goose appear conspicuously darker than the grey feathering of the body. The whole plumage of the Bean-Goose, on the other hand, is more uniformly dark, the head and neck being much the same shade as that of the body. In the field the Pink-foot seems a short plump bird, whereas the Bean is of more slender and elegant build.

The Griffon Vulture in South Spain.

Mr. R. Atkinson showed slides and made the following remarks :—

Griffon Vultures are fairly well distributed over southern Spain, where they feed on the dead cattle and donkeys of the inhabited plains and breed in the bare sierras. Their nesting is colonial, although the habit seems less social than due to the often confined choice of nesting ledges and caverns. The nests in a large griffonry near Tarifa were spread out, on suitable ledges, over at least a hundred yards of cliff edge. This colony was situated in very typical Griffon country : a broad valley, peasant farmed, rose by bare, boulder-strewn ground with a few olive-trees and orange groves lower down, to the nesting sierra—a long, narrow, 400 foot high knife-edge of rock rising from the rim of the valley. Griffons soaring over the cliff betrayed the site of the colony from a distance of miles.

The great size of a Griffon Vulture is its most impressive feature ; it has a wing-span of three yards, and the single white egg it lays is 3½ inches long. The nests varied from barely more than scrapes in the soil débris of the ledges to bulky piles of branches, lined with dead fronds of the hand-palm. At close quarters Griffons bore no sign of their carrion eating, and were as clean and well preened as any other bird of happier feeding habits.

Photography from hides was comparatively simple, and the first close-up photographs of Griffon Vultures were obtained. Although it is written that Griffon Vultures never attack human beings, I was attacked while lying on a Griffon's nest; and although Griffons are supposed to be invariably silent, this particular bird made loudly ferocious grunting and hissing noises.

Film of the Great Bustard.

Mr. C. R. Stonor showed Dr. Horst Siewerts' film of the courtship display of the Great Bustard. This film showed a number of excellent studies of the Great Bustard in North Prussia, also other birds of the same area, including the Stone Plover, Curlew, and Lapwing.

A new Lark from Nyasaland.

Mr. C. W. Benson sent the following description :—

Mirafra africana nyikæ, subsp. nov.

Description.—Differs from the type of *M. a. nigrescens* Reichenow, Orn. Monatsb. viii. p. 39, 1900 : Elton Pass in Ukinga, north of Lake Nyasa, with which it has been compared by Captain C. H. B. Grant, in being more tawny in general colour, and has centre of inner secondaries tawny and black, not practically wholly black. Below the markings on the chest are rather larger. The flanks are streaked and have rufous tips, though these characters are not so conspicuous as in the type of *M. a. nigrescens*. Hind claw long, *i. e.*, 18–22 mm. as against 16 mm. of hind claw of type of *M. a. nigrescens*, which in turn has a longer and less curved hind claw than a specimen collected by Rear-Admiral Lynes from Nasondoye, S.E. Belgian Congo (Brit. Mus. Reg. no.1931.12.21.21), and also this specimen lacks the flank markings present in the type of *M. a. nigrescens* and in *M. a. nyikæ*.

Differs from *M. a. tropicalis* Hartert, Nov. Zool. vii. p. 45, 1900 : Bukoba, Tanganyika Territory, by the underside being less bright, less rufous, and the chest-markings more attenuated,

and V-shaped rather than pear-shaped, while on the upper side *M. a. nyikæ* has a generally less rufous appearance. It has also a longer hind claw, *i. e.*, eight specimens of *M. a. nyikæ* have hind claw measuring 18–22 mm., as against twenty-six of *M. a. tropicalis* measuring 9–13 mm.

Soft parts.—Bill white, culmen and extreme tip sepia; feet and soles white; iris red-brown.

Distribution.—Only known from the Nyika Plateau, northern Nyasaland.

Type.—In the British Museum. Adult male. Nyika Plateau, at an elevation of 8000 feet, Nyasaland. Collected by C. W. Benson on July 6, 1938. Collector's no. 1400. Brit. Mus. Reg. no. 1939.1.12.3.

Measurements of type.—Wing 101, tail 54, culmen from base 20, tarsus 37 mm.

Remarks.—This bird inhabits the short grassland of the Nyika Plateau at 7500–8000 feet, and I believe it to be peculiar to this area. The first specimen (sex undetermined) was collected by the Rev. W. P. Young, and I have added seven more specimens (four males, three females), including the type, all of which are in the British Museum.

A nest was found on November 10, 1937, containing two eggs. These as well as the female parent, which was caught on the nest, are in the British Museum. The six other specimens were collected in July, and had sexual organs small. There is a difference of size in the sexes. Four males have wings 98–105 mm. and three females 90–95 mm.

A new race of Sunbird from Eastern Africa.

Dr. Van Someren sent the following description :—

Cyanomitra olivacea puguensis, subsp. nov.

Description.—A race of *C. o. olivacea* with tufted females nearest in distribution to *C. o. olivacina* Peters, of Inhambane, Portuguese East Africa, and *C. o. changamwensis* Mearns, of the Kenya Coast belt, but actually separating these two races along the East African Coast, and differing from both.

From *C. o. changamwensis*, this race differs in being larger, a darker purer olive-green from crown to rump ; and in being darker on the lower surface, more washed with yellowish-green, especially on the throat and flanks. The most striking difference, however, is in the size and shape of the bill ; in this new race the bill is deeper and wider toward the base, and is almost parallel at its basal half, and then tapers rapidly, whereas in *C. o. changamwensis* the bill is more slender and is more gradually curved from a point of the nostril opening to the tip. This bill character holds good in both male and female of the new race.

From *C. o. olivacina* Peters, the Mafia–Pugu Forest race differs in the formation of the bill as described above, and also in the colour of the mantle, *C. o. puguensis* being darker, and on the under surface is less washed with greenish.

Type.—Male, Kilindoni Forest, Mafia Island, 12. vi. 38. Moreau Coll. ♂ Wings : males 58–65, females 54–58 mm., as against males 58–60, females 52–56 mm. in *C. o. changamwensis*.

Distribution.—So far as is known, this new race extends from the Island of Mafia to the mainland forests west of Dar-es-Salaam (Pugu Forest).

General Remarks.—This race is described from a series of thirteen skins, kindly submitted to me by R. E. Moreau of Amani, who drew my attention to the heavy character of the bills of these birds compared to a series of *C. o. changamwensis* which I had sent him.

By good fortune, I still had available a small series of *Cyanomitra olivacea olivacina* Peters, taken by J. Vincent in Portuguese East Africa and kindly lent to me by the British Museum. I was thus able to compare Mr. Moreau's birds with that race, as well as with *C. o. changamwensis* Mearns. I take this opportunity to record my view that J. Vincent, Ibis, 1934, pp. 85–92, was incorrect in sinking the race *C. o. changamwensis* within *C. o. olivacina* Peters, because there is a distinct difference in coloration between the two, and, moreover, with the material sent to me by Mr. Moreau, it would appear that a third race separates the distribution of the two mentioned above. I have dealt fully with this

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subject in my "Report on the Birds of the Chyulu Range," 'Journal of the East Africa and Uganda Natural History Society,' vol. xiv. nos. 1 & 2, now in the press.

A new Race of Partridge from Manchuria.

The Marquess Hachisuka and Prince Taka-Tsukasa sent the following description:—

Perdix barbata castaneothorax, subsp. nov.

Description.—Male adult. Similar in size and pattern to the North Manchurian race, but is decidedly richer in colour throughout the body. The upper parts are darker chestnut-brown, especially noticeable on the crown and the wing-coverts. The forehead, face, chin, throat, and breast are cinnamon rufous instead of light buff.

Measurements of type.—Wing 148, tail 87, tarsus 37, culmen 14·5 mm.

Type.—In Prince Taka-Tsukasa's Museum. Male adult. Rotetsuzan, Port Arthur, Southern Manchuria, May 10, 1925; collected by Mr. Nagura, no. 1846.

Material Examined.—Over fifty specimens from Manchuria and North China.

Remarks.—The typical race was described from Nerchinsk, Siberian border of north-west Manchuria, and *P. suschkini* from Chabarowsk, Amur district, at the extreme north-east border of Manchuria. If the second race is recognizable, which was described from two specimens, the two races must be found within Manchuria. The Bearded Partridges found in north and central Manchuria all belong to one race; but, unfortunately, as we have no specimens from the two type-localities those northern and central birds cannot be identified with absolute certainty. However, we may call them *P. suschkini* after Hartert (1921) and Meise (1934), who also did not examine any satisfactory material. The new race is found commonly in the Liau Tung Peninsula, and the intermediate specimens were obtained from Yingkow and Hokamon, north-west of Mukden. In Mukden the northern race is met with; however, in Jehol it is replaced by *Alectoris* in the desert. They are again found in Peking and westward to Kansu and Shensi.

A new Species and eight new Races from Peleng and Taliaboe.

Prof. Oscar Neumann sent descriptions of one new species and eight new subspecies from Peleng (Peling) Island, east of Celebes, and Taliaboe, the most western and largest of the Sula Islands.

These birds were collected by Herr J. J. Menden on an expedition arranged—so far as birds are concerned—on behalf of the Museum of Comparative Zoology, Cambridge, Mass., through Prof. Neumann's instructions with the much acknowledged help of the authorities of the Buitenzorg Museum, and was made from July to October 1938.

Only native collectors had once made a bird collection on Peleng for the Dresden Museum in 1895, while the ornis of Taliaboe Island was hitherto perfectly unknown.

The types of the species and subspecies described will go to the Museum of Comparative Zoology.

Tyto nigrobrunnea, sp. nov.

Description.—Adult female head and whole upper side, wing-coverts, wings, and tail uniform brownish-black, with very small dirty-white spots on interscapulum, rump, and most of the wing-coverts. No indication of bars on primaries and tail. Some faint white vermiculation on the basal half of the inner webs of the primaries and secondaries, and an indication of yellowish vermiculation on the inner webs of the tail-feathers, almost disappearing on the outer webs and on the two middle tail-feathers. Facial disk pinkish-brown, but black around the eyes, facial frill brown, most feathers with black edges. Underside a very fine golden brown, thinly vermiculated with black and covered all over with black spots, which are far larger than the white spots of the upper side. Under wing-coverts like the underside, under tail-coverts and thighs almost spotless. The white vermiculation is clearly visible on the underside of the wings.

A strong silky gloss on facial disk, a remarkable silky gloss on the whole underside, but faint on the upper side of the bird. Iris brown, bill greyish-black, according to label, but very

pale in the distal half in the dry skin, feet grey. Feet darker than in *T. rosenbergi*. Lower tarsus and toes practically bare.

Wing 283, tail 185 mm.

Distribution.—Taliaboe, perhaps all Sula Islands.

Type.—Female, Taliaboe, 20. x. 1938 ; J. J. Menden leg.

Remarks.—This very small *Tyto* is at once distinguished from all other species of the genus by its very dark coloration, almost without any white, except on the underside of the wings.

Columba vitiensis mendeni, subsp. nov.

Description.—Male and female most similar to *Columba vitensis halmaheira* Bonaparte (=*albigularis* auct. plur.), with which it has been hitherto united, but much smaller—wing, male 204–219, female 235 mm. (in two cases out of six 225 and 226 mm., female 208–223 mm.), as against male 237–242, female 235 mm., in typical *C. v. halmaheira*. There is far less metallic gloss on the underside, and this gloss is more red and less green. The under tail-coverts are pale grey. Iris yellow or golden-yellow, eyelid red, bill red (but in dry skins only the basal half is red, the distal half yellow, feet red or violet).

Distribution.—Sula Islands.

Type.—Male, Taliaboe Island, 14. x. 1938 ; J. J. Menden leg.

Remarks.—Six males and six females were compared by Stresemann with four specimens from Batjan, which may be regarded as typical *C. r. halmaheira*. As long ago as 1898 Hartert (Nov. Zool. v. p. 136) had drawn attention to the small size and other peculiarities of the only one female from Sula Besi, which he had at his disposal. It appears that a careful investigation of the other populations of *C. v. halmaheira* (small islands north of Celebes and different groups of the Papuan subregion) is badly wanted.

Macropygia amboinensis sedecima, subsp. nov.

Description.—Male similar to *Macropygia amboinensis albicapilla* from Celebes and Teleng, with which it has been

hitherto united, but brighter and more suffused with cinnamon on the upper side and far more pigmented, therefore darker on belly and under tail-coverts.

Female more different even from male of *M. a. albicapilla* than the male. Head cinnamon, the hind neck not different from that of *M. a. albicapilla*, but the upper side, and all wing-coverts black with broad cinnamon edges, the black and the cinnamon in strong contrast. Rump, upper tail-coverts, and tail brighter and more cinnamon than in *M. a. albicapilla*.

Chin and upper throat white slightly washed with cinnamon, the remaining underside cinnamon, darker on throat and breast, where the black bases of the feathers are partly visible, and on the under tail-coverts.

The bird is somewhat smaller than *M. a. albicapilla* ; wing, male and female, 142–158 mm. (most 148–153 mm.), as compared to 153–165 mm. in *M. a. albicapilla*.

Distribution.—Taliaboe, but probably all Sula islands.

Type.—Male, Taliaboe, 2. x. 1938 ; J. J. Menden leg.

Remarks.—Three ad. males, two semi-ad. males, seven females were compared with eight ad. males, three semi-ad. or juv. males, and three ad. females from Peleng, and several males and females from different regions of Celebes.

Turnix sylvatica kinneari, subsp. nov.

Description.—Female larger and much darker on the underside than *Turnix sylvatica maculosa* Temminck from the lesser Sunda Islands and islands south-west of New Guinea, and *T. s. beccarii* Salvad. from Celebes, and, according to Mr. Kinnear, nearest to *T. s. horsbrughi* Ingram from Yule Island.

The whole underside deep maroon, but much lighted up in the middle of the belly. The upper side also darker than in *T. s. maculosa* and *T. s. beccarii*. From *T. s. salomonis* Mayr. (American Museum Novitates, no. 1001.29.12.1938), which seems to be somewhat similar as regards colour of underside and size, it seems to differ in first line by the colour of the crown, as in *T. s. petersi* this is similar to that of *T. s. maculosa* and *T. s. beccarii*,

Male much darker on the underside than male of *T. s. maculosa* and of *T. s. beccarii*.

Wing, female 79–85, male 74–78 mm.

Distribution.—Peleng Island.

Type.—Female, Peleng Island, 20. vii. 1938 ; J. J. Menden leg.

Remarks.—Four ad. females, one semi-ad. female, six ad. males, were compared with several *T. s. maculosa*, *T. s. beccarii*, and *T. s. saturata* in the Berlin Museum, and with all specimens of available races by Mr. Kinnear in London, and by Dr. Junge in Leiden. Named in honour of Mr. N. B. Kinnear.

A more detailed description of the specimens will be published later on.

Tyto rosenbergi pelengensis, subsp. nov.

Description.—Ad. male. Very similar to *Tyto rosenbergi rosenbergi* (Schlegel) from Celebes, but the feathers of the lower throat and upper breast with subterminal broken up black edges, thus giving these feathers a somewhat scaled appearance. Much smaller than *T. r. rosenbergi*.

Wing 296 mm., as compared with 335–360 mm. in *T. r. rosenbergi* (*fide* Meyer and Wiglesworth, 'Birds of Celebes,' i. p. 110).

Distribution.—Peleng (Peling) Island.

Type.—Male, Peleng, 22. viii. 1938 ; J. J. Menden leg.

Remarks.—Only this one specimen was collected.

Caprimulgus macrurus jungei, subsp. nov.

Description.—Male and female very similar to *Caprimulgus macrurus celebensis* Ogilvie Grant from Celebes, but the extension of the white tips of the two outer pairs of tail-feathers still more reduced, 15–17 mm., as compared to 25 mm. in *C. m. celebensis* and about 50 mm. in *C. m. macrurus*.

Wing, male 168–183 mm. Iris brown.

Distribution.—Taliaboe.

Type.—Male, Taliaboe, 13. x. 38 ; J. J. Menden leg.

Remarks.—Menden collected ten specimens, of which six are marked male and four female. If these indications are

correct, then there is no difference, either in size or in colour, between the two sexes. Otherwise all these specimens are males, as none exhibit the characters attributed to the female of *C. macrurus* by Hartert in the 'Catalogue of Birds,' vol. xvi.

Named in honour of Dr. Junge, Leiden Museum.

Rhipidura teijsmanni sulaensis, subsp. nov.

Description.—Male and female similar to *Rhipidura teijsmanni toradja* Stresemann from north-west, central, and south-east Celebes, but the terminal edges of the tail-feathers somewhat more extended and of same colour as the basal two-thirds of the tail-feathers, viz., pure cinnamon, not suffused with olivaceous-grey. Female differs from the male in having the throat more olivaceous and only the upper portion sooty-black.

Wing, male 72, female 66 mm., middle tail-feathers, male 85, female 79 mm.

Distribution.—Taliaboe.

Type.—Male, 11. x. 1938 ; J. J. Menden leg.

Remarks.—Only this one pair was collected. The genus *Rhipidura* is new to the Sula Islands.

Coracina schistacea petersi, subsp. nov.

Description.—Male and female similar to *Coracina personata schistacea* Sharpe from the Sula Islands, with which it had been hitherto united, but considerably smaller and with a smaller and slenderer bill.

Wing, male 157–158, female 149–154 mm., as compared with male 161–165, female 156–163 mm. in *C. s. schistacea.*

Distribution.—Peleng Island.

Type.—Male, Peleng Island, 17. viii. 1938 ; J. J. Menden leg.

Remarks.—Three males, four females, from Peleng were compared with six males, five females, of *C. s. schistaceus* from Taliaboe, Sula Islands.

Named after Mr. James L. Peters, Cambridge, Mass.

Oriolus chinensis stresemanni, subsp. nov.

Description.—Male and female most similar to *Oriolus chinensis frontalis* Wallace from the Sula Islands, with which it

had been hitherto united, but smaller and especially with a shorter and darker, viz., more red bill.

Wing, male 146–155, female 143–145 mm., as compared with male 156–162, female 152–155 mm. in *O. c. frontalis*. Bill, male 31–33 mm., as against female, 35–37 mm. in *O. c. frontalis*.

Distribution.—Peleng Island.

Type.—Peleng, 15. vii. 1938 ; J. J. Menden leg.

Remarks.—Six ad. males, two ad. females, two juv. females, were compared with six ad. males, four ad. females, one juv. female, of *O. c. frontalis* from Taliaboe.

The bill is marked ivory colour in both series, but in the dry skin it is darker red in *O. c. stresemanni* and slightly paler in *O. c. frontalis*.

24 APR 1939
PURCHASED

BULLETIN

16 MAY 1939
PURCHASED

OF THE

BRITISH ORNITHOLOGISTS' CLUB.

No. CCCCXXII.

The four-hundred-and-seventeenth Meeting of the Club was held on Wednesday, April 12, 1939, at the Rembrandt Hotel, Thurloe Place, S.W. 7.

Chairman : Dr. A. Landsborough Thomson.

Members of the Club :—Miss P. Barclay-Smith ; Mrs. H. W. Boyd Watt ; Col. S. R. Clarke ; J. Delacour ; A. Ezra ; Miss J. M. Ferrier ; J. Fisher ; Capt. H. A. Gilbert ; Col. A. E. Hamerton ; B. G. Harrison ; Rev. F. C. R. Jourdain ; Miss E. P. Leach ; Miss C. Longfield ; Rear-Admiral H. Lynes ; C. W. Mackworth-Praed ; G. M. Mathews ; Col. R. Meinertzhagen ; C. Oldham ; B. B. Osmaston ; Miss J. Rhodes ; W. L. Sclater ; The Marquess of Tavistock ; B. W. Tucker ; H. Whistler ; H. F. Witherby.

Guest of the Club :—Dr. A. S. Parkes.

Guests :—Mr. and Mrs. J. C. Greenway ; Miss M. S. van Oostalen.

Members of the Club, 26 ; Guest of the Club, 1 ; Guests, 3 ; Total 30.

The Physiological Basis of Plumage Characters.

Dr. A. S. Parkes gave the following talk :—

It is not possible at present to make any valid generalizations about the physiological control of plumage characters in birds, but a number of examples may be cited where investigation has revealed dependence of the plumage on the hormones of the ovary or testis, or of the thyroid gland. Most of the available information has been obtained from the study of domestic fowl kept under experimental conditions, but there can be little doubt that the conclusions will be applicable to at least some of the wild species.

Control by the Ovary.—In most breeds of domestic fowl there is sex dimorphism in structure, and often in colour, of the plumage. Thus, in the Brown Leghorn, the cock has brilliant red, orange, and black display plumage, while the hen is sombre fawn and grey. This breed is of particular interest, since the plumage characters and the nature of the sex dimorphism appear to be identical with those seen in the jungle-fowl, the presumptive parent stock of domesticated fowl. Removal of the testis from the Brown Leghorn does not affect the plumage, while removal of the ovary causes the hen to acquire the display plumage of the cock. Injection of ovarian extracts causes the cock's plumage to become henny. In this breed the sex dimorphism in plumage is entirely due to the activity of the ovary, and the display plumage of the male is merely the neutral or asexual condition. This type of plumage control is also found in several other well-known species, including Pheasants and Peacocks. The fact that the display plumage appears following the removal of ovarian influence accounts for the sex reversals in plumage which are sometimes seen. Disease which damages the functional activity of the ovary will result, at the next moult, in the appearance of male-type feathers, and it is possible, therefore, for a hen with a previous history of laying to acquire male plumage. If this is acquired gradually a sex mosaic pattern may appear, due to the intermingling of male and female feathers.

Control by Ovary and Testis.—In certain breeds, such as the Sebright Bantam, the plumage of the two sexes is identical, being henny in character. Removal of the ovaries or testes results in the bird acquiring display plumage of a kind which would be expected in the males of such a breed. Injection of testicular or ovarian hormones to the capon or poularde leads to the display plumage reverting to henny type. In this breed, therefore, the lack of sex dimorphism is due to suppression of display plumage by the hormones of both testis and ovary. In addition to the Sebright Bantam there are certain other breeds, including strains of Campines and of Game Cocks, in which the cock is normally hen-feathered. A somewhat similar condition is seen in ducks, in which the temporary seasonal assumption of eclipse plumage of female type by the drake seems to be dependent on testicular activity, since it is not seen in long-standing capon drakes. Removal of the ovaries from the duck leads to the appearance of permanent display plumage, identical with the nuptial plumage of the drake. In this species, therefore, the means of plumage control seem to be a combination of those found in the Leghorn and in the Sebright.

Control by the Testis.—Among domestic fowl there seems to be no example of sex dimorphism of plumage due to testicular activity, but the sex dimorphism in the Ruff is reported to be of this type.

Influence of the Thyroid Gland.—In several breeds of fowl the characterization of the normal plumage is dependent for its full expression on the hormone of the thyroid gland, and is disturbed by removal of the gland. In particular deficiency of thyroid hormone seems to prevent the deposition of melanin, and cause alteration of the structure of the feather by elongation of the blade and suppression of barbule formation. As a result light coloured, long, and heavily fringed feathers are characteristic of thyroid deficiency. Conversely, injection of thyroid hormone increases deposition of melanin and barbule formation, thus leading to the production of short, dark feathers without a fringe. These feather characters are clearly related to those involved in many cases of sex dimorphism, but it is

not possible to explain the influence of the ovary and testis on plumage as being due primarily to inhibition and stimulation of the thyroid gland. The dependence of plumage characters on the activity of the thyroid gland implies that any environmental condition which influences thyroid activity will influence plumage, and it is possible that this is a factor in the slight variations in plumage found within the same species in different localities.

Discussion.

Colonel MEINERTZHAGEN asked the following questions :—

(*a*) Can a hormone be isolated ?

(*b*) Has any work been done on the effect of ultra-violet rays on the hormones which are responsible for pattern or pigmentation ?

(*c*) Was the lecturer certain about the absence of colour change in feathers. He drew attention to experiments which had been done on Wigeon passing to and from eclipse (Lord William Percy at Alnwick) and to the red-brown autumn feathers of the Linnet which change to blood-red in spring. The latter is not entirely the effect of abrasion.

Mr. B. W. TUCKER said that he would like to allude to two points arising out of Dr. Parkes's very interesting communication. These related to the eclipse plumage of ducks and to the abnormalities called gynandromorphs. Dr. Parkes had suggested that the inhibition of the eclipse plumage by castration might be an indirect effect. It seemed to him that this view had been clearly substantiated by experiments of more recent date than the classical ones of Goodale on the subject. It had been shown, though he regretted that, speaking from memory, he could not recall the name of the author *, that whereas castrated Mallards ordinarily failed to develop the eclipse plumage, if feathers were actually plucked in castrated birds at the time when the eclipse is nominally

* The reference in question is : O. Kuhn, Archiv f. Entwicklungsmechanik, cxxvii. 1932, pp. 456–541 (esp. pp. 525–533).

assumed, the new ones come in of the normal eclipse type. From this it seems clear that castration does not strictly inhibit the eclipse plumage as such, but through some kind of physiological disturbance inhibits the moult. The effect is therefore of a different nature from the direct hormonic control of plumage characters in the fowl and other species.

With regard to gynandromorphs (abnormalities having one side of the body male and the other female—*cf.* Bull. B. O. C. xlviii. 1928, pp. 98–116) Dr. Parkes had remarked that the interpretation of these in birds was difficult. In animals like insects, where the external sex-characters are determined directly by the presence of the male or female number of sex chromosomes in the individual cells of the body, gynandromorphs were easily explained in terms of an irregular distribution of these chromosomes, so that one side of the body received the female number and the other the male. But as Dr. Parkes had observed, zoologists had long considered this explanation inapplicable to birds, in view of the experimental work on the fowl which conclusively demonstrated a control of plumage by harmones, which, since they circulate all through the body in the blood-stream, could not exert a bilateral effect. Consequently other and more complex interpretations had been suggested, in terms of differential susceptibility to hormonic influence of cells with the male and with the female chromosome number, and so forth. But it appeared to him that the difficulties in the way of a simple interpretation had been largely resolved by investigations in recent years on finches and allied birds to which Dr. Parkes had briefly alluded at the close of his address.

Typical gynandromorphs (which are in any case exceedingly rare) had been observed chiefly in finches and related birds. Now it had been shown by Keck in 1934 that in the House-Sparrow (a member of the *Ploceidæ* according to Sushkin, but anyhow a very close ally of the finches) the plumage is independent of hormonic control. The reproductive organs can be removed, and even organs of the opposite sex grafted in, and none of these things affects the plumage at all. Subsequently this had also been shown to hold good in the Bullfinch

and up to a point in some weaver-birds as well. Thus in the very group of birds in which gynandromorphs had been chiefly recorded the plumage was now known to be controlled in a quite different way from that demonstrated in the fowl, and such gynandromorphs could thus be reasonably explained in just the same way as in insects. On the other hand, in the group (the game-birds) to which the fowl belongs typical gynandromorphs were not known. A fowl described by Macklin, though a gynandromorph in respect of its organs and certain other characters, had the plumage of a hen, and this is what would be expected. The only other gynandromorphic game-bird known, a Pheasant described by Bond, was of a very peculiar type, and the most odd thing about it was that each individual tail-feather had one half male and the other female. It appeared impossible satisfactorily to account for this condition in the present state of knowledge, but there seemed little doubt that it must represent an abnormality of a different type from the ordinary gynandromorph, and one which still required the assumption of some sort of differential susceptibility on the two sides of each tail-feather to explain it.

Monsieur J. Delacour, Mr. J. Fisher, Mr. J. C. Greenway, Dr. A. Landsborough Thomson, Mr. B. B. Osmaston, Mr. W. L. Sclater, The Marquess of Tavistock, and Mr. H. F. Witherby also joined in the discussion.

Some Birds of the American Family Icteridæ.

Mr. W. L. Sclater exhibited some birds of the American family Icteridæ, which he had been recently rearranging and renaming in the Natural History Museum.

Among them was the race, *Icterus graduacauda richardsoni* Sclater, obtained at Chimalapa in the mountains of southern Mexico in 1890 by W. B. Richardson, and a second example of *Icterus fuertesi* Chapman, only known hitherto from the unique type obtained near Tampico in eastern Mexico. Another bird, *Icterus gularis tamaulipensis* Ridgway, hitherto only known from Mexico, was found to range into Texas, and is an addition to the B. O. U. ' Check-List.'

A race of the Chilean Blackbird, *Notiopsar curæus reynoldsi* Sclater, from Tierra del Fuego, was named after Mr. W. P. Reynolds, who first obtained the specimens for the Museum.

Lastly, he showed an example of *Oreopsar bolivianus* Sclater, from southern Bolivia, based on some skins collected by Bridges over a hundred years ago, and others by P. O. Simons more recently.

Full details and descriptions will be found in the January number of 'The Ibis' for this year (pp. 140–145).

A new Race of the Pied Shrike of India.

Mr. Hugh Whistler made the following remarks on the Pied Shrike (*Hemipus picatus*), and exhibited specimens in illustration :—

It has been known for many years that the Pied Shrike falls into two races in India and Burma, races so well marked indeed that they were originally described as separate species. In the northern form, *Hemipus picatus capitalis*, both the male and female have the back brown, but the male is distinguished by having the head glossy-black. In the southern and typical form the female is similarly brown-backed and brown-headed, but the male has the back black as well as the head. The young male in first winter plumage is not to be distinguished from the adult female. Birds from Ceylon have hitherto been regarded as belonging to the south Indian or typical form. A series of Pied Shrikes have just been collected in Ceylon in the course of the Ornithological Survey which is being conducted by Mr. Malpas and Mr. Phillips on behalf of the British and Colombo Museums. On examining these I was at once struck by the fact that the females are black-headed and black-backed birds indistinguishable from the adult males, thereby carrying the evolutionary sequence of the colour-pattern of the other two races still further. The Ceylon race is, in fact, the most marked and highly developed of the three, and must be recognized. As that wonderful observer Legge ('Birds of Ceylon,' p. 375) had already noticed that females in Ceylon were black-backed, though he had not

in fact realized the significance of the point, I propose to call the new race

Hemipus picatus leggei, subsp. nov.

Type.—Ceylon Survey Series, no. 284. Adult female collected at Ohiya, 5800 feet, Ceylon, on November 29, 1936. To be deposited in the British Museum.

Note.—The juvenile plumage of this form is not yet known, and it will be of great interest to discover how it falls into the plumage sequence of the group.

A new Genus and Species of Tanager from Central Brazil.

Mr. J. Berlioz sent the following description of a new Passerine bird (? Tanagridæ) from central Brazil :—

I feel it more convenient actually to consider this bird, of which unfortunately a single specimen was secured, as a new generic type,

RHYNCHOTHRAUPIS, gen. nov.,

with no near ally and a somewhat doubtful systematic position, its bill being more icterine in shape than tanagrine or fringilline ; but its weaker feet, its plumage, general appearance, and pattern are closest to those of the Tanagers. It differs from most of the South American Tanagers and Finches by stouter bill (somewhat intermediate in shape between *Arremon* and *Dolichonyx*, and even comparatively larger, considering the size of the bird), with the base of the culmen and the mesorhinium flattened instead of being ridged, and the interramal space of the mandible more shortly rounded in front. The tail also is comparatively short, with long upper and under tail-coverts, reaching at least to its middle.

Rhynchothraupis mesoleuca, sp. nov.

Finch-like bird with general plumage, including wings and tail, uniformly deep black, slightly glossy on the upper surface owing to the shiny fringes of all the feathers. On the throat a small concealed patch of white at the base of the feathers. A large elongated area of pure white occupies

the middle of breast and belly, and merges posteriorly into the mixed black and white vent, thighs, and proximal under tail-coverts, the longest of which are nearly entirely black. Inner and longer under wing-coverts whitish. Wings rounded, the fourth quill the longest. Tail rather short and rounded, the rectrices wide and soft.

Bill high at base, stout and conical, compressed laterally; culmen nearly straight, produced on front into a distinct and slightly flattened mesorhinium; nostrils rounded and exposed. Bill apparently bluish-grey, becoming whitish along the tornia. Feet greyish-black.

Total length 140; culmen 15; tarsus 17; wing 70; tail 60 mm.

Type and unique specimen (in the Paris Museum). Male adult, collected at Juruena, north-east of Cuyaba, Matto Grosso (Central Brazil), in dry forest, on August 25, 1938, by Dr. A. Vellard.

Until better known this bird can be placed among the Tanagridæ, not far perhaps from the rare *Conothraupis speculigera* (Gould) from Peru, both representing aberrant types, with a somewhat similar pattern.

Two new Races of Petrel.

Mr. Gregory M. Mathews sent the following description of a new Prion from New Zealand and one from the Falkland Islands.

Heteroprion belcheri lalfa, subsp. nov.

Description.—Differs from *H. b. belcheri* in having a wider bill, which measures 24 to 25 mm. in length by 10 mm. in width. *H. b. belcheri* has a bill measurement of 25 by 8 mm., and *H. b. serventyi* has a bill measurement of 26 by 11 to 12 mm.

Distribution.—New Zealand seas.

Type.—An unsexed adult in my collection. Wing 176; tail 88; tarsus 30; middle toe and claw 37; bill 25 by 10 mm. Collected on Kapiti Island in 1934.

Type-locality.—Kapiti Island, New Zealand.

Remarks.—It appears from the above that the New Zealand subspecies of the thin-billed Prion is intermediate between the eastern and western Australian forms.

Heteroprion belcheri falklandicus, subsp. nov.

Description.—Differs from *H. b. solanderi* Mathews in being larger in all the measurements.

H. b. solanderi : wing 184 ; tail 87 ; tarsus 29·5 ; toe and claw 34 ; bill 23 by 10 mm.

H. b. falklandicus : wing 187·7 ; tail 94·6 ; tarsus 32·6 ; toe and middle claw 39·8 ; bill 25·4 by 11 mm. (Average of seven skins.)

Distribution and type-locality.—Breeding on the Falkland Islands.

Type.—In the British Museum. A male collected by J. E. Hamilton on January 4, 1931. No. 1932.7.2.21.

Measurements of type.—Bill 25 ; wing 188 ; tail 94 ; tarsus 33 ; middle toe and claw 40 mm.

Six new Races from Peling.

Prof. Oscar Neumann sent the following descriptions of six new races from Peling Island, east of Celebes.

The types of these races will be deposited in the Museum of Comparative Zoology in Cambridge, Mass.

Megapodius nicobariensis perrufus, subsp. nov.

Description.—Male and female. Similar to *Megapodius nicobariensis bernsteini* Schlegel from the Sula Islands, which is the only race of *Megapodius* in which the upper side and underside are of about the same colour. But this uniformity in coloration is still more perfect. The whole bird is rufous, and the olivaceous suffusion, which is so prominent in *M. n. bernsteini*, especially on the upper side, is almost missing. The difference is also remarkable on the underside, though not so strong as on the upperside. The race is also larger : wing of three males and five females 195–206 mm., as against 182–188 mm. in six males and eight females of *M. n. bernsteinii* from Taliaboe, Sula Islands, and 185–193 mm. in eight specimens from Sula Mangoli (*vide* Mayr *in litt.*).

Distribution.—Peling Island,

Type.—Male, Peleng, 8. viii. 1938 ; J. J. Menden leg.

Remarks.—Dr. Junge (Leiden), Mr. Kinnear (London), and Dr. Mayr (New York) were so kind as to compare some of my Peling specimens with the type and other specimens of *M. n. bernsteini* from Sula Mangoli before I had seen the Taliaboe series.

Rallus torquatus simillimus, subsp. nov.

Description.—Male and female. Very similar to *Rallus torquatus sulcirostris* Wallace from Sula Mangoli and Taliaboe, but larger and slightly more rufous and a little darker on the upper parts. Wing : male, 148–165 ; female, 148–151 ; as against male, 144–154, female, 140–150 mm. in *Rallus torquatus sulcirostris*.

Distribution.—Peling Island.

Type.—Male, Peling, 17. viii. 38 ; J. J. Menden leg.

Remarks.—The difference in colour is very slight, and some specimens are scarcely different in this respect. I would not have given the Peling population a new name were it not an island race. Hartert's remarks, Nov. Zool. vol. v. p. 136, that younger specimens have a finely speckled throat and the adults have an entirely black throat seems incorrect. My largest males have a speckled throat, while apparently the adult females have all black throats.

Here too Dr. Junge, Mr. Kinnear, and Dr. Mayr were so kind as to compare my Peling specimens with Sula specimens in their collections, though their results arrived at were not quite identical.

Haliastur indus permistus, subsp. nov.

Description.—Male and female. Without any shaft-stripes on the underside, therefore perfectly resembling *Haliastur indus girrenera* from Australia and New Guinea, but much larger, of about the same dimensions as the western races of *Haliastur indus*, viz., *H. i. indus*, *H. i. intermedius*, and *H. i. ambiguus*. Wing : male, 372 and 383 ; female, 389–406 mm. ; as against 352–360 mm. in tropical specimens of *H. i. girrenera* and 357–380 mm. in South Australian.

Distribution.—Peling Island, probably also the Sula Islands.

Type.—Female, 3. vii. 1938, Peling ; J. J. Menden leg.

Remarks.—While the majority of Celebes specimens, viz., *Haliastur indus ambiguus* Brüggemann, have well-marked though thin shaft-stripes on the underside, the Peleng series (two males and six females) before me is plain white on the underside, only one of the two males exhibit a slight indication of shaft-stripes.

Otus manadensis mendeni, subsp. nov.

Description.—Male and female. Far more grey than even the least reddish or brown specimen of *Otus manadensis manadensis* from Celebes. The black stripes, which are so conspicuous in *O. m. manadensis*, are obsolete or even wanting. The whole pattern is much finer, more uniform, and less variegated. The dimensions are smaller. Wing : male, 141 ; female, 148 mm. ; as compared to 147–156 mm. in *O. m. manadensis.*

Distribution.—Peling Island.

Type.—Female, Peling, 4. vii. 1938 ; J. J. Menden leg.

Remarks.—Dr. Mayr has compared these two specimens with the types of *O. m. sulaensis* Hartert and *O. m. kalidupæ* Hartert. It is, as he writes me, nearest to *O. m. kalidupæ*, but is much smaller. Wing in *kalidupæ* : male, 170 ; female, 169 mm.

The unique type of *O. m. sulaensis*, male, has the same wing-length as *O. m. kalidupæ*, viz., 170 mm. Besides that it is very rufous and dark.

It may be that there are two different " Formenkreise " on the Moluccas and the islands south and east of Celebes, of which the larger one must eventually be called *Otus magica.* Perhaps *sulaensis* and *kalidupae* are subspecies of *magica*, as well as *Otus mentawi* Chasen and Kloss from the Mentawi Archipelago, west of south Sumatra, which in my opinion is most related to *Otus magica* (Müller).

Alisterus amboinensis versicolor, subsp. nov.

Description.—Male and female. Most similar to *Alisterus amboinensis dorsalis* (Quoy & Gaimard) from north-western New Guinea and the western Papuan Islands, but smaller:

wing, male and female, 173–182 mm., as against 182–196 mm. in *A. a. dorsalis*. It differs from *A. a. sulaensis* Reichenow from the Sula Islands, with which it had been hitherto united by its more blue and less green upperside, the interscapulum being pure dark blue in all adult specimens, while it is always mixed with green feathers in *A. a. sulaensis*. In my series of three males, three females, and three juvenile females there is no specimen which has the whole interscapulum green, as has the type and other younger females from the Sula Islands.

Distribution.—Peling Island.

Type.—Male ad. Peling, 8. viii. 1938 ; J. J. Menden leg.

Remarks.—Even two young females from Peling with black bill and pointed tail-feathers with rosy tips have the larger portion of the interscapulum blue and only a green necklace *. In my revision of the genus *Alisterus*, ' Verhandlungen des VI. Internationalen Ornithologen-Kongresses,' Kopenhagen, 1926, I remarked, on p. 452, " Perhaps investigations of larger series will show differences between the Sula and the Peling populations." This assumption has now come true.

Halcyon coromanda pelingensis, subsp. nov.

Description.—Male and female. Similar to *Halcyon coromanda rufa* Wallace from Celebes, but much smaller, wing 106–115 mm., as against 120–126 mm. in *H. c. rufa* Wallace. Culmen 53–56 mm., as against 62–67 mm. in *H. c. rufa*.

Distribution.—Peling Island, perhaps adjacent parts of Celebes.

Type.—Peling, 12. vii. 1938 ; J. J. Menden leg.

Remarks.—There are several races of *Halcyon coromanda* on Celebes and on the adjacent islands. Even assuming that the largest specimens, recorded by Meyer and Wiglesworth in ' Birds of Celebes,' vol. i. p. 287, are winter visitors from Japan, belonging to *Halcyon coromanda major* Temm. & Schl., there

* There is no specimen in my series which has the bill red as on plate vii. of 'Birds of Celebes.' In the adult specimens the basal third of the upper mandible is coral-red, while the remainder and the lower mandible are black. In younger specimens the whole bill is black.

are still larger and smaller specimens there. Mr. Kinnear tells me that the type of *H. c. rufa* Wallace from Macassar, Celebes, has a wing-length of 120 mm., therefore 5 mm. more than my largest specimen. On the other hand, two specimens from Taliaboe, Sula Islands, have wing-lengths of 121 and 123 mm. and bills of 63–64 mm., and Hartert (Nov. Zool. v. p. 129) gives for a series from Sula Mangoli : wing 120–124, culmen 63–67 mm. We must therefore, for the time being, call this Sula race *H. c. rufa*, though the distribution seems rather strange.

A careful revision of the races of *Halcyon coromanda* is badly needed. Perhaps the number of subspecies will be considerably increased. There is very little sexual or individual variation in large series from one region.

A new Race of Forest Warbler from Nyasaland.

Mr. C. W. Benson sent the following note on the status of the genus *Bradypterus* in Nyasaland, including the description of a new Forest Warbler :—

1. *Preliminary.*

Admiral Lynes, in the J. f. O., Suppl. 1934, pp. 85–86, regards *Bradypterus nyassæ* as a race of *B. cinnamomeus*, and Vincent, in 'The Ibis,' 1935, pp. 510–511, considers the possibility of there being two representatives of the genus in Nyasaland (in addition, of course, to the swamp dweller, *B. brachypterus*)—a long-tailed bird with broad webs and a short-tailed with narrow webs.

When collecting recently on the Nyika Plateau and on Nyakhowa Mountain, in Nyasaland, I was surprised and interested to find a species of *Bradypterus* frequenting thick grass and bracken growth *outside* evergreen forest. It had a call quite distinct from that of the bird living *inside* the evergreen forest, with which I was already very familiar, and which is aptly described by Vincent in 'The Ibis,' 1935, pp. 511–512. Vincent mentions birds, presumably with the calls he describes, as living "just within or around the edges of the forest." It is certainly true that such calls are occasionally to be heard in thick bracken growth outside forest, but they are far more frequently heard from the *interior* of

forest. The true inhabitant of thick grass and bracken growth utters a trill not so loud as the " chit-chit-chit chit " (Vincent) of the forest bird. It is usually preceded by a trisyllabic " tee, tee, tee." The alarm call is not so sharp as the " chirrip " (Vincent) of the forest bird.

I have examined all the Nyasaland specimens belonging to this genus in the British Museum, and I find that, apart from *B. brachypterus* of swamps, they can be divided into two groups—a long-tailed (*B. cinnamomeus nyassæ*) and a short-tailed. It also appears that the former is distinguishable by having broad webs to the tail, the latter narrow webs. A great many of the specimens have too many of their tail-feathers missing for it to be possible for the tail-length to be determined. But in the case of those in which it is possible, when grouped accordingly, it also becomes evident that there is a colour difference. The long-tailed birds differ from the short-tailed on the underside in that the wash of pale brown colour on the chest is less rufous, more pure brown, and on the chin and throat there is little or no wash, resulting in a more generally white appearance in that region. The specimens with very incomplete tails fall into one or other of the two groups as by colour, except for four specimens from the Masuku Mts. and one from Nyakhowa Mt., in the north, collected by me *inside* evergreen forest, and with a call similar to such birds further south, and which agree closely in colouring with *B. usambaræ*. In size, too, they correspond closely, though none of the tails are complete enough for it to be of any value to take their lengths into consideration (except that there is no reason to consider them to be long-tailed birds, since the longest tail among them (consisting of seven feathers) is 64 mm. only (see below).

2. *Summary of Tail-length Measurements.*

Seven Nyasaland specimens with nine feathers or more in tail (complete tail has ten feathers) have tail-length 60–67 mm. (two males, 61, 63, five ? sex, 60–67 mm.). Habitat *interior* of evergreen forest.

Seven Nyasaland specimens (completeness of tail not taken

into account, have tail-length 68–80 mm. (four males, 74–80, three females, 68–71 mm.). Habitat dense grass and bracken *outside* evergreen forest. Eight specimens of *B. usambaræ* from N.E. Tanganyika and Southern Kenya :

(*a*) Ten tail-feathers : two males, 60–65, two females, 55–61 mm.

(*b*) Eight tail-feathers : three males, 58–63, one female, 55 mm. (as the central pair of tail-feathers in the complete tail do not project more than 4 mm. beyond the adjacent feathers these measurements may be regarded as of value for the present purpose).

3. *Description of a new Subspecies of the Forest Warbler* Bradypterus usambaræ.

I consider that the Nyasaland short-tailed bird should be regarded as a race of *B. usambaræ*, also clearly a short-tailed bird. Both inhabit evergreen forest, and when at Amani, N.E. Tanganyika, I at once recognized the call of what I took to be the Nyasaland forest bird, which Mr. R. E. Moreau informed me was in fact that of *B. usambaræ*. I propose to name this bird

Bradypterus usambaræ granti, subsp. nov.

Description.—Differs from *B. u. usambaræ* in the generally less grey tinge of the brown colouring on the underside, including the flanks, and in the more rufous, less chocolate colour of the upper side.

Soft Parts.—Bill dark grey, with basal two-thirds of lower mandible pale grey ; feet pale brown ; iris dark brown.

Distribution.—Evergreen forests of Nyasaland at 3000 feet and over to as far north as the Vipya Plateau.

Type.—In the British Museum. Adult male. Lichenya Plateau, Mlanje Mt., Nyasaland. Collected by Jack Vincent on December 31, 1931. Collector's no. 118. Brit. Mus. Reg. no. 1933.3.1.1031.

Measurements of Type.—Wing 62, tail (complete with ten feathers) 60 ; culmen from base 16 ; tarsus 25·5 mm.

Remarks.—Named in honour of Captain C. H. B. Grant, to whom I am indebted for his interest and advice regarding this problem.

The ways in which this bird differs from *B. cinnamomeus nyassæ* have already been indicated (tail-length, colour, voice, and habitat). Twenty specimens examined.

4. *General.*

It is remarkable that the form *B. usambaræ granti* should only now be recognized, although Sir Charles Belcher records notes clearly mainly referable to it in his book ' The Birds of Nyasaland ' (1930), and it was in fact first collected by Mr. Alexander Whyte as long ago as the 'nineties of the last century. The colour differences between it and *B. cinnamomeus nyassæ* are not distinctive in the way that they are between the two species further north. This is an excellent example of how field observations can be of assistance to systematic work in museums.

It should be noted that *B. cinnamomeus nyassæ* has not been recorded from between the Nyika and Mlanje, nor do I believe that it does in fact occur (also note that *Turdus olivaceus* has not been found between the Nyika and Malosa, almost as great a distance). Although there is plenty of suitable country for it I have nowhere heard its voice. It should be pointed out that while evergreen forest is not susceptible to fire, bracken and grass growth is, and this may explain its absence. On the other hand, there is Vincent's suggestion that the type of *B. nyassæ* may have been wrongly labelled and in reality have been obtained in northern Nyasaland.

It is likely that a review of the genus as a whole, which I have not had the time to carry out, will show that the name *B. usambaræ* will have to be relegated to subspecific status. Thus it is possible, for instance, that *B. msiri* Neave, from the southern Belgian Congo, an older name, should be regarded as conspecific with *B. usambaræ*. *B. msiri* is only known from the type-specimen, which unfortunately has a very incomplete tail, and it is not possible to decide whether it is conspecific

with *B. usambaræ* or *B. cinnamomeus*. In colouring it is close to *B. usambaræ granti*, though it is a deeper chocolate on the upper side and on the flanks and thighs. Again Moreau, in Proc. Zool. Soc. part 4, 1935, p. 882, regards *B. mariæ* Madarasz., from Kilimanjaro, as conspecific with *B. usambaræ*.

The distributions of the species considered in this paper and their races are as follows :—

1. Bradypterus usambaræ. Short-tailed. Habitat interior of evergreen forest.

(a) *Bradypterus usambaræ usambaræ* (of which *B. roehli* Grote, Orn. Monatsb. xxviii. p. 6, 1920 : Mlalo, near Wilhelmstal, Tanganyika Territory, is a synonym, see Sclater and Moreau, Ibis, 1933, p. 23).

Bradypterus usambaræ Reichenow, Journ. Orn. 1917, p. 391 : Usambara, Tanganyika Territory.

Distribution.—Taita Hills in southern Kenya : North Paré, Usambara Mts., Nguru Mts., and Mt. Rungwe, in Tanganyika Territory : Masuku Mts. and Nyakhowa Mt., in northern Nyasaland.

Remarks.—Seventeen specimens examined.

(b) *Bradypterus usambaræ granti.*

Distribution.—Nyasaland to as far north as the Vipya Plateau.

2. Bradypterus cinnamomeus. Long tailed. Habitat dense growth such as of bracken and grass *outside* evergreen forest.

(a) *Bradypterus cinnamomeus cinnamomeus.*

Sylvia ? (*Salicaria*) *cinnamomea* Rüppell, N. Wirbelt., Vög. p. 111, pl. xlii., 1840 : Entschetgab, Simen Prov.

Distribution.—Abyssinia, Kenya Colony, and Ruwenzori.

(b) *Bradypterus cinnamomeus rufoflavidus* *.

Bradypterus rufoflavidus Reichenow & Neumann, Orn. Monatsb. iii. p. 75, 1895 : Kifinika Hut, Kilimanjaro.

* Although not recognized in the ' Systema Avium Æthiopicarum,' this race is recognized by Sclater in Proc. Zool. Soc. part 4, 1935, p. 881.

Distribution.—Kilimanjaro and Usambara Mts., in northern Tanganyika Territory.

(c) *Bradypterus cinnamomeus nyassæ* (much less generally rufous than the two preceding races).

Bradypterus nyassæ Shelley, Ibis, 1893, p. 16 : Milanje Plateau, 6000 ft., Nyasaland.

Distribution.—Mlanje Mt., Nyakhowa Mt., Nyika Plateau, and Mafinga Mts., in Nyasaland : Njombe, in S.W. Tanganyika Territory : Nguru Mts., in East Central Tanganyika Territory.

Remarks.—Eleven specimens examined.

Notes on some Eastern African Birds.

Capt. C. H. B. Grant and Mr. C. W. Mackworth-Praed sent the following six notes :—

(1) On the Type-locality of *Jynx ruficollis* Wagler.

In the Bull. B. O. C. lix. 1939, p. 72, we discussed this question. Recently Dr. C. E. Hellmayr has kindly drawn our attention to an article by Stresemann in the Journ. für. Orn. 1922, pp. 498–503, entitled "The development of the bird collections in the Berlin Museum, under Illiger and Lichtenstein." On p. 501 of this article we learn that Ludwig Krebs was a farmer at Uitenhage. We therefore consider that the exact type-locality of *Jynx ruficollis* Wag. can be fixed as Uitenhage, Eastern Cape Province, South Africa.

(2) On the Races of *Smithornis capensis* (Smith) occurring in Eastern Africa.

Van Someren, Nov. Zool. xxix. 1922, p. 99, recognizes five races ; Sclater, Syst. Av. Æthiop. 1930, p. 305, recognizes seven races ; Bannerman, Ibis, 1923, p. 718, recognizes six races ; and Sclater, Jackson's Bds. Kenya Colony and Uganda, ii. 1938, p. 768, recognizes three races, and is correct in bringing *S. c. camerunensis* Sharpe into western Uganda.

Dr. Stresemann, on behalf of Mr. Moreau, compared Amani birds with *S. c. suahelicus* Grote, and found that they agree.

We have examined carefully the good series in the British Museum collection, and find that there is quite considerable individual variation—for instance, birds from Natal have both olivaceous-grey and olivaceous-brown mantles. It is, therefore, on quite general characters that races can be separated, and we are only able to recognize three in eastern Africa, as follows :—

Smithornis capensis capensis (Smith).

Platyrhynchus capensis A. Smith, Ill. Zool. S. Afr. Av. 1839, pl. xxvii. : northern Zululand, South Africa ; of which *Smithornis capensis albigularis* Hartert, Bull. B. O. C. xiv. 1904, p. 73 : Canhoça, Angola, becomes a synonym.

Below white, sometimes tinged with buff, with black streaks. Wing 68–75 mm.

Distribution.—South-eastern South Africa to Angola, the Rhodesias, south-eastern Belgian Congo, Nyasaland and Portuguese East Africa.

Smithornis capensis camerunensis Sharpe.

Smithornis camerunensis Sharpe, Ibis, 1905, p. 469 : River Ja, Cameroon.

Much darker and warmer in general colour both above and below, browner on mantle. Wing 69–73 mm.

Distribution.—Cameroon to western Uganda.

Smithornis capensis medianus Hart. & van Som.

Smithornis capensis medianus Hartert & van Someren, Bull. B. O. C. xxxvi. 1916, p. 59 : Kyambu Forest, near Nairobi, Kenya Colony ; of which *Smithornis capensis meinertzhageni* van Someren, Bull. B. O. C. xl. 1919, p. 24 : Lerundo, Kavirondo, Kenya Colony, and *Smithornis capensis suahelicus* Grote, O. M. xxiv. 1926, p. 17 : Magogoni, Ruvu River, eastern Tanganyika Territory, are synonyms.

Sides of chest and below strongly washed with buff, but not so dark as *S. c. camerunensis*. Wing 64–75 mm.

Distribution.—Kenya Colony and Tanganyika Territory.

Some specimens from Portuguese East Africa, north of the Zambesi and Nyasaland, show characters of both *S. c. capensis* and *S. c. medianus*.

(3) On the Status of *Mirafra schillingsi* Reichenow, J. f. O. 1916, p. 163 : Njiri, Gonja Plain, west of Kilimanjaro, north-eastern Tanganyika Territory.

Reichenow compared this bird with *M. cheniana* Smith and *M. marginata* Hawker. Sclater, Syst. Av. Æthiop. ii. 1930, p. 309, places it as a race of *M. cheniana*. Through the kindness of Dr. Stresemann, of the Berlin Museum, we have had the loan of the two specimens on which *M. schillingsi* was founded. These prove not only that it is a good race, but that it is not a race of *M. cheniana* but a race of *Mirafra cantillans* Blyth, as the following tail measurements show :—

Mirafra cheniana.

Males (ten measured) 45–48 mm.
Females (two measured) 42–45 mm.

Mirafra cantillans marginata.

Males (seven measured) 49–52 mm.
Females (four measured) 47–52 mm.

Mirafra cantillans chadensis.

Males (eight measured) 52–57 mm.
Females (three measured) 47–49 mm.

Mirafra schillingsi.

Males (two meaaured) 55 mm.

It is of interest to note that Reichenow was correct in naming one of the specimens (no. 1246, dated December 16, 1903, from Gonja Steppe) as *Mirafra cantillans* in Schilling's ' Mit Blitzlicht und Buchse,' 1905, p. 555, no. 300. The second specimen (no. 375, dated January 19, 1903, from Ndjiri) is not recorded in this list.

(4) On the correct reference for *Galerida cristata somaliensis*.

Both Reichenow, in the J. f. O. p. 49, and Bianchi, in Bull. Acad. Sci. St. Petersb. (5) xxv. p. 62, gave the name *G. c. somaliensis* to this British Somaliland race in 1907 ; and Sclater, Syst. Av. Æthiop. ii. p. 326, 1930, in a footnote states : " It is difficult to say which has priority."

Bianchi's paper on the Alaudidæ is in the June and September 1906 number, and was sent in by him under date November 9, 1905. This paper and number is bound up in vol. xxv. 1906, but, according to the date on the back of the titlepage, was not published until November 1907. We submitted this question to Dr. Sherborn, who very kindly replied :—" There is no evidence (or knowledge) that the date of Bianchi is other than 1907. See Contem, back of titlepage, imprimateur." Therefore the date of Bianchi's *Galerida cristata somaliensis* ex Hartert, Vög. Pal. Fauna, 1904, p. 235 : Somaliland, must be accepted as November 1907.

The date of the J. f. O. in which Reichenow published *Galerida cristata somaliensis* is January 1907 ; and as we know that this number came out in January of that year, the British Museum copy having been received in London on February 2, 1907, there can be no question that Reichenow, J. f. O. 1907, p. 49 : Zeila, British Somaliland, has priority.

(5) On the Occurrence of *Calandrella brachydactila longipennis* (Eversmann) (Bull. Soc. Imp. Nat. Moscou, xxi. 1848, p. 219 : Lake Ala Kul, Dzungaria, Semiyechensk Province, Turkestan, eastern Russia), in Kenya Colony.

This race of the Short-toed Lark has been recorded by Sclater, Syst. Av. Æthiop. ii. 1930, p. 332, van Someren, Nov. Zool. xxxvii. 1932, p. 332, and Sclater, Jackson's Bds. Kenya Colony and Uganda, ii. 1938, p. 796 ; all being based on the specimen in the British Museum collection ; a female, taken by Lord Delamere at Athi River, Kenya Colony, on November 14, 1899 (Brit. Mus. Reg. no. 1901.2.22.247).

Meinertzhagen, Nicoll's Bds. Egypt, i. 1930, p. 184, does not give this race as occurring in Kenya Colony.

We have carefully examined this specimen, and find it is an example of *Tephrocorys cinerea saturatior* (Reichenow). Therefore *Calandrella brachydactila longipennis* does not occur further south in eastern Africa than the Sudan.

(6) On the Generic Status of *Tephrocorys blanfordi* Shelley, Bds. Afr. iii. 1902, p. 128, pl. xxi. fig. 2 : Senafé, Eritrea.

Although Hartert, Vög. Pal. Faun. Enganz, 1933, p. 104, considered *Calandrella* and *Tephrocorys* to be congeneric, we are of the opinion that they are better kept separate, as has been done by Sclater, Syst. Av. Æthiop. ii. 1930, and other authors.

Shelley placed his *T. blanfordi* in the genus *Tephrocorys*, as does Sclater, Syst. Av. Æthiop. ii. 1930, p. 333, but Bates, Ibis, 1936, p. 550, places it in the genus *Calandrella*, giving the opinion that it is closely allied to the Short-toed Larks, but is not merely a race of *C. brachydactila* (Leisler).

An examination of the series of *T. blanfordi* in the British Museum collection shows that it has the first four primaries almost of equal length as has *Tephrocorys*, whereas *Calandrella* has the fourth primary considerably shorter than the first three. In general colour *T. blanfordi* agrees closely with *Calandrella* but has a shorter tail and a different wing character ; and agrees with *Tephrocorys* in the wing character but not in the length of the tail. Unless a new genus is created for *T. blanfordi*, which seems undesirable, we are of opinion that it should be left in that genus to which Shelley assigned it, and, in view of its shorter tail, that it be treated as a species.

10 MAY 1939
PURCHASED

BULLETIN

21 JUN 1939
PURCHASED

OF THE

BRITISH ORNITHOLOGISTS' CLUB.

No. CCCCXXIII.

The four-hundred-and-eighteenth Meeting of the Club was held on Wednesday, May 10, 1939, at the Rembrandt Hotel, Thurloe Place, S.W. 7.

Chairman : Dr. A. Landsborough Thomson.

Members of the Club :—W. B. Alexander ; Dr. D. A. Bannerman ; F. J. F. Barrington ; Miss M. G. S. Best ; Mrs. W. Boyd-Watt ; A. Ezra ; Miss J. M. Ferrier ; J. Fisher ; Miss E. M. Godman ; Capt. C. H. B. Grant (*Editor*) ; B. Guy Harrison ; P. A. D. Hollom ; Dr. E. Hopkinson ; The Rev. F. C. R. Jourdain ; N. B. Kinnear ; Major A. G. Lambart-Sladen (*Hon. Treasurer*) ; Miss E. P. Leach ; Miss C. Longfield ; Dr. P. R. Lowe ; Willoughby P. Lowe ; C. W. Mackworth-Praed ; Lt-Col. H. A. F. Magrath ; Dr. P. H. Manson-Bahr ; G. M. Mathews ; Col. R. Meinertzhagen ; R. E. Moreau ; T. H. Newman ; A. S. Phillips ; Mrs. J. B. Priestley ; Miss G. M. Rhodes ; W. L. Sclater ; B. W. Tucker ; H. F. Witherby.

Guest of the Club :—C. L. Collenette.

Guests :—Mrs. R. Bacon ; R. Bacon ; Col. A. M. Binney ; Miss T. Clay ; R. A. Falla ; Mrs. Mackworth-Praed ; Mrs. E. V. Phillips ; Mrs. W. L. Sclater.

Members of the Club, 34 ; Guest of the Club, 1 ; Guests, 8 ; Total 43.

Wild Life in Richmond Park, Surrey.

Mr. C. L. COLLENETTE showed some ancient documents relating to this Park and said that the Park was enclosed in 1637, and since that time the boundaries have not altered. Of so-called vermin in the Park, foxes, grey squirrels, Crows, and to some extent Jays are on the black list. One fox earth had numerous remains of Mallard and Tufted Duck scattered round its entrance.

Considering that Richmond Park is well within the built-up area of London, some 7 miles from Charing Cross, and with St. Paul's Cathedral within easy view, the figure of 108 species for 1938 seems a high one. As the official bird observer for the Park I receive records from some twenty-five ornithologists.

The combined figures of breeding and non-breeding species has risen steadily from 83 in the year 1930 to 108 in 1938. During this time a considerable area to the west and south of the Park has turned from open country into bricks and mortar, and, furthermore, streets and shops are far more brightly illuminated at night than formerly. Is it not probable that birds passing over London at night see below them mile after mile of lights and activity, and then the very considerable dark and quiet area of the Park, and that they are tempted to descend for a brief rest to a greater extent than formerly? As an illustration, in the past four years we have had short visits from such birds as Pied Flycatcher (twice), Sedge-Warbler (twice), Short-eared Owl, Stone-Curlew (three times), Curlew-Sandpiper, Greenshank (twice), Jack Snipe, and Water Rail. These rarely or never appeared in the earlier records. The species of birds which nest in the Park are decreasing. The Wheatear ceased to nest about 1908, the Yellow Wagtail about 1912, the Rook in 1924, the Nightingale about 1926, and the Nightjar about 1930. The Woodlark is gradually becoming scarcer, and at the present rate of decrease will not be found in a year or two. The majority of these species have left us owing to the restriction of nesting areas and less rural condition of the Park owing to its increased use by pedestrians, horsemen, and dogs.

On the other hand, of the small ground-nesting birds, Tree-Pipits occur in numbers, while a few pairs of Reed- and Yellow Buntings, Whinchat, Stonechat, Skylark, and Meadow-Pipit are found in the open.

The majority of the oak- and birch-trees are old and decayed, which affords excellent conditions to the Redstart, Tree-Sparrow, Nuthatch, Jackdaw, Stock Dove, and the Woodpeckers. The Redstart is one of the principal ornithological attractions. In April 1935 I located about twenty-five separate pairs. During the next year or two they decreased, perhaps owing to a programme of lopping the decayed portion of the trees by the authorities. This spring (1939) they are again distinctly common.

The Stock Dove is a rather shy bird in the nesting season, and it is not easy to estimate the population. In winter, however, any number up to about seventy may be seen feeding on the food put down for the deer, and I believe that all these birds remain to nest. Tree-Sparrows are not uncommon in the nesting season, scattered over the area as single pairs, or perhaps two pairs in one tree, in the old and isolated oaks. The Blackcap is, in some years, a commoner bird than the Whitethroat or Willow-Warbler. The Coal-Tit can always be seen in mixed flocks of Tits during the winter, but is usually completely absent during the nesting season. Bramblings and Hawfinches can be seen practically every winter. Only one or two pairs of Hawfinches nest. A male Dartford Warbler spent the whole of the winter of 1937/38 in a patch of withered bracken. A Great Grey Shrike was commonly seen in the winter before last, and less commonly during the past winter.

The Pen Ponds are hardly large enough to attract the scarcer waterfowl, but such birds as Goldeneye, Pintail, Shoveler, Wigeon, and Goosander are recorded in most years. Goosanders are shy birds, and usually leave about 10 or 11 A.M., when the first people and dogs come down to the water. On some occasions I have counted over fifty, but a more usual number is five or ten. The Great-crested Grebe first appeared on the Ponds in the year 1899, and since that date has been

so well reported in print that I have been able to compile an almost complete list of its nesting year by year. Two pairs usually nest, and young are frequently reared.

Waterfowl as a whole do not rear large families. Broods of Tufted Duck, Mallard, Coot, and Moorhen usually finish with only one or two survivors after the first three or four weeks. For this the pike are partly responsible, but perhaps the Carrion-Crow is just as much to blame. A Crow has been seen to take a duckling from the surface of the water. Tufted Ducks have increased as a nesting species, and Sedge- and Reed-Warblers occasionally pay a visit to the Sanctuary. The Little Grebe, at one time a strangely scarce bird, is now present as a rule during the winter, and may become a nesting species.

The heronry which is now in Sidmouth Plantation originated with one pair in 1880, and this year numbers sixty-one pairs.

Remarks on Visits to Museums on the Continent and in the United States.

Colonel R. Meinertzhagen said that during the past few years he had visited and worked in many of the larger museums of Europe and North America.

In discussing methods with the heads of the various museums during his recent visit to the United States he found that arranging and maintaining collections is the primary function of the staff, though other activities are regarded as no less important—contact with collectors and expeditions, even though unconnected with the museum, asking for exchange of new material, and encouraging young enterprise.

No less important is considered the contact with potential financial resources. No museum can progress on a Government subsidy alone. In the United States the tapping of private fortunes has been brought to a fine art, but this is no place to discuss the details. It has been said that a government museum is at a disadvantage, and cannot properly pick up crumbs from the rich man's table : my answer to that is that these crumbs are picked up eagerly enough when

dropped, and that museums in America succeed in obtaining much financial help from private sources.

Our Museum is notoriously under-staffed ; with collections which are greater than in any American museum our staff is less than half of what one finds in a museum in the States. The staffs of American museums are able to go about much more than ours. Work in the field is part of the routine, while with us it is an exception. Visits to other museums, establishing good relations with other workers, and making personal contacts is the rule abroad. Incidentally, it may not be generally known that the Trustees of the American Museum of Natural History have generously offered to pay the expenses of any British ornithologist on the staff of the British Museum, or recommended by the British Museum, who may wish to work on the Rothschild Collection in New York.

The care of specimens and appreciation of good preparation was of a high standard in every museum visited. Skins are kept in large trays, where no birds lie on top of each other, which is infinitely better than placing specimens in boxes : trays also obviate the mutilation of specimens to enable them to fit in with the box system of storage. Types are kept in separate cabinets, or are so clearly marked that they can be readily found and removed. (In the Rothschild Collection the hundreds of types could have been removed in any afternoon by one man.) In Washington and many other museums the types are kept in locked cabinets, and are not available except by request. Another routine matter, which is the invariable rule in most museums visited, is the constant removal and degreasing of greasy specimens, so that a contaminated specimen does not infect the whole series.

The high standard of preparation of specimens is very marked in America. Russian and American standards in this respect are perhaps the best. Experience in the field spells appreciation of excellent preparation, and a high standard in this respect cannot be too strongly stressed. A small series of perfect skins is of much more value than a large series of old, and in many instances ill prepared,

specimens. This principle is insisted on in all American museums. Perhaps the most noticeable feature of the American museums is the excellence and profusion of educational exhibits. The high degree of real art is remarkable. The Field Museum in Chicago leads in this respect.

Any worker in ornithology must be struck by the amount of literature turned out by America. In some museums publication funds are short, in others they are abundant; but every institution has its own organ in which new work appears from time to time. Our British Museum has no such organ, although it contributes to the cost of 'The Ibis' when times are favourable, and much of 'The Ibis' material is work on British Museum collections. The present need for perpetuating the Tring 'Novitates' offers a golden opportunity for the initiation of a British Museum 'Novitates.' The lack of some such organ is not generally realized, but delays in publication have before now resulted in the loss of types.

Facilities for work in continental and American museums are very elastic. They all have their official hours of opening and closing, but the speaker had never been refused access for work on Saturday afternoons and even the whole of Sundays, often as late as he wished; on one occasion he had worked throughout an entire night in the Berlin Museum, and was the sole occupant of the building.

In England we still have the best material in almost every branch of natural history, and we have unique opportunities within the Empire to maintain this lead.

Migration in the Mediterranean.

Dr. D. A. Bannerman, who had just returned from a cruise to Greece and Istanbul, gave a brief account of his experiences, and in particular of the migrants which he had seen on the voyage.

Leaving Toulon on the evening of April 8 the ship passed through the Straits of Bonifacio between Corsica and Sardinia the following day, April 9, and from there direct to Naples. Few birds were noted on this run; about a dozen Swallows, one Black-eared Wheatear, and one Lesser Kestrel, both of which last secured a foothold on the two masts and remained

there overnight. At dawn the following day it was reported that the Kestrel was seen tearing a small bird to pieces, presumably the Wheatear. On April 12, At Delphi, where passengers had an opportunity of viewing the celebrated ruins, several Egyptian Vultures were observed and a fine view was obtained of a Lammergeier. On April 14, while driving from Nauplia to Epidaurus, two European Bee-eaters were seen at close quarters by the roadside—the first and only Bee-eaters seen anywhere in the Archipelago between April 12 and 21. On April 18 a great number of Alpine Swifts were observed at Istanbul. On April 19 a number of Rollers had arrived at Troy, but none were to be seen on the Gallipoli Peninsula. On the whole migrants were not much in evidence until April 22, on which date a remarkable number of species were observed. Leaving the island of Melos in the evening of April 21, the course was set to Sicily, the ship passing between the island of Kythèra and the mainland of Greece and making for the Straits of Messina. By daylight on April 22 the ship was well out in the Ionian Sea, the sea was slight and wind freshening from the north-west. The following fifteen identified species were sighted in the order named :—

Numerous Swallows.

1 Common Kestrel, ♀.

1 Woodchat Shrike (typical race).

1 Whitethroat.

1 Yellow Wagtail (subsequently killed by Lesser Kestrel).

5 Turtle-Doves in one flock and sundry odd birds, possibly the same scattered flock, but believed different.

1 Short-eared Owl, settled several times on and in ship's lifeboats, and flew round ship many times, but never settled for more than half a minute, and finally disappeared in daylight.

1 Whinchat.

1 Common Wheatear.

1 Grey Shrike (sp. uncertain).

6 Lesser Kestrels, followed ship for two or three hours, constantly resting on mast, and eventually all six clinging on together and apparently remaining for night.

1 Small flock of what I am almost certain were Spoonbills, flying close to the waves at some distance off, heading due north, which would take them straight up the Adriatic.

1 Norfolk Plover, flying round and round ship, never over it, but did not settle, and disappeared before dusk.

1 European Pratincole, flying over the ship, then close round the bows near the water, then round the stern and back over the forward upper deck; kept with us as light failed, but not seen to settle on ship.

1 Lesser Ringed Plover, first seen walking on lower deck as the ship was nearing Straits of Messina, much exhausted, allowed itself to be picked up. Intending to save it from the Kestrels kept it for the night in my cabin, but it was dead in the morning. Body appeared well nourished, and I fail to understand why it did not make land, which must almost have been in sight when it came aboard. Dusk had fallen before the ship had come level with Mount Etna.

Attention may be drawn to the fact that on April 22 birds were passing north the entire day from dawn till dusk, and if, as seems probable, they had come from Africa they had chosen the widest spot at which to cross the Mediterranean.

Dr. Bannerman further remarked on the amazing number of Levantine Shearwaters (*Puffinus yelkouan*) which he observed in the Dardanelles, Sea of Marmora, and entrance to the Bosporus. Steaming slowly up the Dardanelles in the evening of April 17 literally thousands of these Shearwaters were seen, in flocks of ten to fifty or more individuals passing at intervals in a regular stream, the majority of the birds passing from east to west with steady unremitting flight. Coming on deck as dawn was breaking off Istanbul on the following morning (April 18) the flocks were still seen passing westwards as if the birds were heading to the Sea of Marmora from the Bosporus. On the return voyage the ship dropped anchor early in the morning of the 19th at Chanak on the Asiatic side of the Dardanelles, and while crossing in a launch to Gallipoli thousands more of the flocks of Levantine

Shearwaters were seen ; this time the majority were passing from west to east, a very few in the opposite direction, keeping close to the water as usual. Considering how numerous this bird is in the Dardanelles, and must be remarked by so many voyagers, it is strange that so little appears to he known of its exact movements. Breeding had evidently not commenced on the dates in mid-April. The Greek islands alone must contain hundreds of nesting colonies, as suitable terrain appears to exist along every coastline passed.

Dr. Bannerman said that he had the curiosity to turn up the account of this species in Godman's 'Monograph of the Petrels,' but absolutely nothing was written there of the immense numbers which are to be seen in the Dardanelles, and practically nothing about its breeding.

Mr. R. E. Moreau said he was particularly interested in Dr. Bannerman's observations because on April 3 Mrs. Moreau and he had seen a very large number of migrants in just the same area opposite the middle of the mouth of the Adriatic. The ship was on the course Port Said to Straits of Messina, and noon position 36° 26′ N., 19° 39′ E. During the morning the wind was E.S.E., estimated at 20 m.p.h., and up till noon the only birds seen were two or three Pipits (not *Anthus cervinus*) and Lesser Kestrels, three *Œnanthe* ? sp., and a Nightingale. Only the last-named settled on board. About midday, however, the wind began to back to N.E., from which quarter it blew at about 30 m.p.h. for the rest of the day, with frequent squalls of cold rain. From about 15.00 hours onwards great numbers of birds were seen. Representatives of those marked * settled on board, for the most part apparently for only a few moments before continuing their journey ; some species, marked **, spent the night on board. The remaining species, which passed straight over the ship without appearing to take much notice of it, were definitely flying almost due north.

Lapwing. One.

**Lesser Kestrels. Many ; six at once were resting on the mizzen cross-trees against the mast.

Cuckoo. One.

Harriers. One party of three, probably Pallid ; one solitary Marsh.

*Hoopoe. One.

Short-eared Owl. One.

Short-toed Larks. Party of about twelve.

*Pipits. A few ; not *Anthus cervinus*.

**Wagtail, Black-headed Yellow, apparently *Motacilla flava feldegg*. Two males.

**Wagtail sp., apparently *Motacilla flava flava*.

*Pied Flycatcher. 1 male.

**Swallows (*H. rustica*). Very numerous indeed. Scores spent the night on board huddled together in sheltered places. Only one was found dead in the morning.

House-Martins. One small party.

Swallows (*H. rufula*). Party of four.

*Nightingale. One.

**Wood-Warbler. One ; died in the night.

*Whitethroat, apparently *Sylvia communis*. Two.

*Redstart, Common. Two.

Redstart, Black. One.

*Wheatear, Common. Several single ones.

*Wheatear, Isabelline. At least one.

*Wheatear Black-eared. Several.

*Chaffinch. One.

*Sparrow. One female. (Presumably a Spanish Sparrow.)

**Linnets. Small parties.

On the course by which these birds were travelling they had a long way to go to reach any land ; they were, in fact, embarked upon about the longest S.–N. crossing to be found in the Mediterranean. In view of the repeated statement that birds seek the narrow crossings it is of interest to ascertain whether their presence in the apparently unfavourable position where we saw them could have been due to the weather. According to information supplied to me by the Meteorological Office, on the morning of April 3 a small depression was centred between Sicily and Greece and moving east. From the wind forces and direction recorded it can be shown

that birds leaving the African coast about dawn on 3rd by the Tripoli–Malta "narrow crossing" would not have been carried east, while those on the optimum Africa–Greece crossing would have been carried westwards but not so far as where we saw them.

A further illustration of the frequent neglect of small birds to make the shortest water-crossings was provided the following day. We passed Stromboli at 04.00, and thereafter set a course to pass inside Elba. We were within twenty miles of land all day and usually within sight of it, in perfect almost windless weather; yet a constant trickle of Linnets in small parties of both sexes and of Lesser Kestrels, kept passing, apparently on the same course as the ship and practically parallel with the coast. Chaffinches, Swallows and a Robin were also seen from noon (position 40° 19′, 13° 25′) onwards throughout the day.

The Griffon Vulture in South Spain.

The Rev. F. C. R. Jourdain sent the following communication:—

In Bull. B. O. C. (*anteà*, p. 85) Mr. R. Atkinson states that the first close-up photographs of Griffon Vultures were obtained by him. This is not quite correct: R. B. Lodge photographed a Griffon on the nest in 1907; in 1919 J. F. Peters obtained "close-up" photographs in the nesting ledges, and W. Verner published figures of young in various stages taken at the nest in 1909.

Mr. Atkinson also says that although "it is written" that Griffon Vultures never attack human beings, he was attacked while in a nest. This is also incorrect. On Mr. Atkinson's own evidence no attack was made; the bird merely alighted on the nest and hissed at him. In his book this noise is described as "indescribably fearsome." Griffons do not attack human beings. I have known them swoop close to one when standing by young in the nest, but a sudden movement always causes a hasty retreat. The demonstration is much on a par with that of a gander, and no more dangerous,

though Mr. Atkinson has described the Griffon as "one of the largest and fiercest of all European birds "(!).

Col. W. Verner has described how a bird with a broken wing which he had shot sprang at him and bit through his coat before he was able to kill it, but almost any wounded animal will do as much. A field-mouse will bite hard when caught—even a long-eared bat will try to do so—yet these animals cannot be said to attack man.

The statement that Griffons are said to be invariably silent ("all the books say so" according to Mr. Atkinson) is also contrary to facts. In the 'Practical Handbook' I wrote, in 1924, "Absolutely silent on the wing, it is often noisy on the breeding ledges, emitting weird grunts and lowing notes. A hissing noise is also occasionally heard at times of excitement, as when young are endangered." Kirke Swann also noted that hoarse croaks were uttered on the wing when the birds were close to the nests. Verner also describes the hissing, but does not mention the grunts or croaks. The works of Newton, Dresser, Seebohm, Saunders, Irby, and Coward contain no reference to the voice, so it is difficult to understand what Mr. Atkinson means by "all the books."

Seven new Races from Indo-China.

Messrs. J. Delacour and J. C. Greenway sent the following descriptions :—

Stachyris striolata helenæ, subsp. nov.

Description.—Intermediate between *S. s. guttata* from Burma and Siam and *S. s. tonkinensis* (=*diluta*) Kinnear from Tonkin and northern Annam. Ear-coverts dark grey as in *tonkinensis*, but underparts of a richer tone, the breast being of a darker and more vivid reddish-brown, the flanks and abdomen redder and darker without an olivaceous tinge. Head, particularly the nape, of a slightly lighter brown.

Type.—Male in Museum of Comparative Zoölogy, Cambridge, Mass., no. 1724, Nam-Khueng, 20 km. west of Ban-Houesai, Mekong River, W. Laos, collected by J. Delacour, J. Greenway, and F. Edmond-Blanc, 17. i. 39.

Measurements of type.—Wing 70, tail 58, tarsus 23, bill (from base) 11 mm.

4 males, 2 females examined, from Xieng-Khouang, Nam-Khueng, and Lo-Tiao (1400 m. alt.). Wings, male, 66, 69, 70, 71 mm.; female, 64, 67 mm.; and numerous specimens from Burma and Indo-China.

Named in honour of Mrs. J. Greenway.

Brachypteryx leucophrys langbianensis, subsp. nov.

Description.—Males differ from *B. l. carolinæ* of southern China and northern Indo-China in having the underparts unspotted and greyish instead of white mottled with brown; the throat is pure white.

Type.—Adult male, field number 2560, Delacour and Greenway collection (VII Expedition en Indo-Chine); Pic de Langbian, near Dalat, Annam, March 13, 1939; in Museum of Comparative Zoölogy, Cambridge, Mass., U.S.A.

Measurements of type.—Wing 61·5, tail 12, tarsus 22, bill (from base) 10 mm.

Zoothera monticola atrata, subsp. nov.

Description.—Differs from *Zoothera m. monticola*, which ranges in the Himalayas from the valley of the Sutlej to Assam, Manipur, and the Chin Hills, in its much darker, blacker general coloration. The upper parts appear to be black, the feathers being very deep grey or black edged with deep black; the head and wings are tinged with brownish. The tips of feathers of the underparts are black. Iris brown; bill black; legs and feet brown.

Type.—Adult female, collected by B. Bjorkegren at Chapa, Tonkin (5000 ft.), January 29, 1939, in Museum of Comparative Zoölogy, Cambridge, Mass., U.S.A.

Measurements of type.—Wing 129, tail 48, bill 26, tarsus 37 mm.

Remarks.—Two males and one female from Chapa examined (wings 130–134 mm.). The colour of the upper parts is much like that of *Z. andromadæ* of Java, which have not

changed colour in the thirty years since they were collected. Variation in length of wing and bill is very great in this species.

Muscicapula sapphira laotiana, subsp. nov.

Description.—Immature males differ from *M. s. sapphira*, which ranges from Nepaul to Yunnan, south to the southern Shan States, in having the head and neck a greyer brown.

Females differ from *M. s. sapphira* in being olive-brown, the rump concolorous with the back, instead of orange-reddish. The throat is whitish-brown instead of russet, and the belly mottled brown and whitish.

Type.—Immature male, field number 1945, Delacour and Greenway collection (VII Expedition en Indo-Chine); Col de Taloun, 25 km. east of Luang Prabang, Laos, January 27, 1939, collected by J. Delacour, J. Greenway, and F. Edmond-Blanc.

Remarks.—Two immature males from the southern Shan States, collected in 1874 and 1902 and now in the British Museum, have grey heads like our birds from Laos. We conclude that there has been no great post-mortem change.

Garrulax moniliger schauenseei, subsp. nov.

Description.—Nearest to *G. m. mouhoti*, from S. Indo-China and S.E. Siam, but differs in having the black collar on the throat extending to the ear-coverts and connected with the line running from the eyes above the ear-coverts, which is blackish instead of grey; ear-coverts mixed with black; upper parts darker, more olive than in *G. m. mouhoti*. The forms *G. m. fuscata* and *G. m. bakeri* from Burma and Siam are paler still, but have a similar collar; their nuchal collar is less reddish and lighter, and also their flanks are less vivid; *G. m. fuscata* is the paler form and has a nuchal collar brighter and better marked than *G. m. bakeri*.

Iris yellow, bill black, legs and feet horny grey.

Type.—Male in Museum of Comparative Zoölogy, Cambridge, Mass., U.S.A., no 76, Xieng-Khouang, Laos (alt. 1200 m.), collected 6. xi. 1938 by J. D., J. G., and F. Ed.-Bl.

Measurements of type.—Wing 125, tail 132, beak (from nostrils) 18, tarsus 40 mm.

Three males, one female examined, from Xieng-Khouang, Ban-Houesai and Nam-Khueng (alt. 450 m.), Laos. Wings, male 122, 125, 126 ; female 122 mm. ; also numerous specimens from S. Indo-China, Siam, Burma, and the Malay Peninsula.

G. m. tonkinensis and *G. m. pasquieri*, from Tonkin and Annam, are much smaller and very differently coloured.

Named in honour of Mr. R. Mayer de Schauensee.

Æthopyga ezrai blanci, subsp. nov.

Description.—Nearest to *Æ. ezrai ezrai* from Dakto (1500 m.), S. Annam, but has the breast and under tail-coverts flammulated with orange-red, as in *Æ. nipalensis*, instrad of pure yellow. The olive-green of the back is also more golden. It resembles closely *Æ. nipalensis victoriæ*, from Mt. Victoria, Burma, but lacks the yellow patch of the back and has a much shorter bill.

Æthopyga e. ezrai is remarkable in lacking the yellow patch on the lower back characteristic of other *Æthopyga*. The two forms known at present are very rare birds, confined to isolated high mountains.

Iris dark brown, bill black, legs dark brown.

Type.—Male in Museum of Comparative Zoölogy, Cambridge, Mass., U.S.A., no. 191, Phu-Kobo (alt. 2000 m.), near Xieng-Khouang, Laos, collected 9. xii. 1938 by J. Delacour and J. Greenway.

Wing 52, tail 61, beak 17, tarsus 15 mm.

Three males examined, from Phu-Kobo. Wings 51, 51, 52, tails 64, 62, 61 mm.

Named in honour of M. François Edmond-Blanc, who obtained the three specimens.

Sitta solangiæ fortior, subsp. nov.

Description.—Differs from *S. s. solangiæ* Delacour and Jabouille, 1930, known only from the type from Chapa, Tonkin, in its darker, bluer, less violet crown, and in the colour of the underparts, which are suffused with violet, less greyish-brown.

Type.—Adult male, field number 2602, Delacour and Greenway collection (VII Expedition en Indo-Chine); Pic de Langbian, near Dalat, Annam, March 14, 1939; in Museum of Comparative Zoölogy, Cambridge, Mass., U.S.A.

Measurements of type.—Wing 83, tail 45, tarsus 17, bill (from base) 14 mm.

Material.—Three specimens including the type, and two unsexed topotypes of *S. solangiæ*.

Remarks.—Further field study will determine the relationship of *S. solangiæ* to *S. frontalis*. It is not improbable that the species is a form of the latter which breeds at higher altitudes.

A new Race of Skylark from South Kiusiu.

The Marquis Yamashina sent the following description :—

After having compared fifteen specimens of Skylarks from Kagoshima Prefecture with seventy-five specimens of *A. a. japonica* from other localities in Japan I have found that the former group differs (as mentioned below) from the latter; therefore I propose to name it

Alauda arvensis kagoshimæ, subsp. nov.

Description.—Similar to *A. a. japonica*, but the black stripes on the crown are broader and more sharply defined. Five out of the fifteen specimens examined have the streaks almost equal to that of the widest individuals among *A. a. japonica*, but the remaining ten have the stripes decidedly wider and more intensive than those of any specimen of *A. a. japonica*.

Type.—Male adult, no. 24918 in Yamashina Collection. Sakurajima, Kagoshima Prefecture, 21. x. 1917.

Measurements.—Male, female adults. Wing 88–101, tail 52–64, exposed culmen 12–14 mm.

Distribution.—I should restrict the range of this new subspecies to Kagoshima Prefecture, but intermediate characters are sometimes found among the specimens from warmer but more northern countries, such as Fukuoka Pref. (rarely), Shizuoka Pref., and Kanagawa Pref.

Remarks.—It has been long considered that *A. a. arvensis* and *A. a. gulgula* have been looked upon as distinct species owing to their different wing formulæ. *A. a. arvensis* occupies the north, and migrates into *A. a. gulgula* country during winter ; the latter appears to be sedentary. Hartert rightly considered them as subspecies to each other in his book, Abh. und Ber. Zool. und Authr. Mus. zu Dresden, 1922, p. 19.

The present new subspecies geographically occupies the southernmost *A. a. arvensis* group in Japan, while in Formosa *A. a. gulgula* group are met. The new race has the intermediate wing formula of the former two species. The variation in the length between fourth and fifth primaries are also smaller among the birds from Fukuoka, Shizuoka, and Kanagawa compared to the typical *A. a. japonica*, which shows 3–5·5 mm. instead of 4–7 mm. in that of the latter.

A. a. japonica sometimes migrates in winter to Kagoshima Pref. and the Riukiu Islands, and I have examined those migrants in Prince Taka-Tsukasa's collection from Kagoshima Pref. and three more in Dr. Kuroda's collection taken in the Riukiu Islands.

It is now necessary to restrict the type-locality of *A. a. japonica*. Those birds collected by Siebold and described by Temminck and Schlegel very likely came from either southern Hondo or northern Kyushu, but nothing is known about its precise locality, so I propose to restrict the type-locality of *A. a. japonica* to northern Hondo in order to avoid complication with my new form.

It is remarkable that the wing formula of this new subspecies is intermediate between those of *A. a. sala* and *A. a. japonica*, which is indicated by the following table :—

	Variations of length between 4th and 5th primary. mm.
A. a. lonnbergi	6·2–11
A. a. quelpartæ (synonym : *nigrescens*) ..	4–7·2
A. a. japonica	3–7
A. a. kagoshimæ, subsp. nov.	2·7–4·7
A. a. sala (synonym : *wattersi*)	1–2·5

Notes on Eastern African Birds.

Capt. C. H. B. Grant and Mr. C. W. Mackworth-Praed sent the following note :—

On the Races and Distribution of *Tephrocorys cinerea* (Gmelin).

Sclater, Syst. Av. Æthiop. ii. 1930, p. 333, recognizes four races, and has suggested that *T .c. anderssoni* occurs in Kenya Colony ; but most South African ornithologists are of opinion that *T. c. anderssoni* (Tristram), Ibis, 1869, p. 434: Otjimbinque, Damaraland, is a synonym of *T. c. cinerea*. Roberts, Ann. Transv. Mus. xi. 1926, p. 224, is of opinion that *Alauda spleniata* Strickland, Contr. Orn. 1852, p. 152 : Damaraland, is quite distinct from *Tephrocorys cinerea* ; and Friedmann, Bull. 153, U.S. Nat. Mus. 1937, p. 38, carries this a step further by saying he " cannot repress a suspicion that *spleniata* may be a good form with an even wider range than Roberts gives it." Reichenow, Vög. Afr. iii. 1904, p. 377, has placed both *Alauda spleniata* and *Megalophoneus anderssoni* as synonyms of *T. cinerea*. Through the kindness of the Cambridge and Liverpool Museums we have had the loan of the types of *A. spleniata* and *M. anderssoni*. There is no doubt that both were collected by Andersson in Damaraland, the former being a bird in the pale phase and the latter being a bird in the dark phase, and as both are completing the moult there can be no question of fading. That dark and light phases occur in the same area is shown by specimens from Little Namaqualand, *i. e.*, Brit. Mus. Reg. nos. 1905.12.29.1448 and 1449, dated April 18 and 27 ; from Damarland, Brit. Mus. Reg. nos. 1907.2.17.60 (in light phase, Oct. 7) and 70 (in dark phase, Nov. 2) ; Eastern Cape Province, Brit. Mus. Reg. no. 1930.12.20.10 (dark phase, February) ; Brit. Mus. Reg. no. 1889.9.13.178 (light phase, October) ; Transvaal, Brit. Mus. Reg. no. 1878.12.31.744 (light phase) ; Brit. Mus. Reg. no. 1905.12.29.1456 (darker phase).

Our examination of the types and the large series in the British Museum collection leaves no doubt that *A. spleniata* and *M. anderssoni* are synonymous.

Owing to the prevalence of dark and light phases throughout its range we are only able to recognize three races, which, except for *T. c. erlangeri*, can only be distinguished by the more northern birds being generally darker and richer in tone, although odd individuals do not conform to this character, and some specimens from South Africa and eastern Africa can be very closely matched.

The races and distribution are as follows :—

Tephrocorys cinerea cinerea (Gmelin).

Alauda cinerea Gmelin, Syst. Nat. 1, pt. 2, 1789, p. 798 : Cape of Good Hope ; of which *Alauda spleniata* Strickland, Jardine's Contr. Orn. 1852, p. 152 : Damaraland ; and *Megalophoneus anderssoni* Tristram, Ibis, 1869, p. 434 : Otjimbinque, Damaraland, are synonyms.

Usually tawny edges to feathers of mantle.

Distribution.—South Africa north to Damaraland (perhaps Angola), Bechuanaland, and the Transvaal.

Tephrocorys cinerea erlangeri Neum.

Tephrocorys cinerea erlangeri Neumann, J. f. O., 1906, p. 239 : Sheikh Mohamed, headwaters Juba River, south Abyssinia ; of which *Tephrocorys cinerea fuertesi* Friedmann, Proc. Biol. Soc. Wash. xlv. 1932, p. 63 : northern Abyssinia, is a synonym.

Black patches on sides of chest.

Distribution.—Abyssinia.

Tephrocorys cinerea saturatior (Reichw.).

Calandrella cinerea saturatior Reichenow, Vög. Afr. iii. 1904, p. 376 : Kondeland, south-western Tanganyika Territory.

Generally darker in colour than *T. c. cinerea* and with usually chestnut edges to feathers of mantle.

Distribution.—Southern Rhodesia, Nyasaland, northern Rhodesia, and south-eastern Belgian Congo, to Uganda and Kenya Colony.

NOTICE.

All manuscript for publication in the 'Bulletin' should be addressed to the Editor, Captain C. H. B. Grant, The Cottage, 15a Emperor's Gate, London, S.W. 7; not to 58a Ennismore Gardens, London, S.W. 7.

BULLETIN

24 JUL 1939
PURCHASED

OF THE

BRITISH ORNITHOLOGISTS' CLUB.

No. CCCCXXIV.

The four-hundred-and-nineteenth Meeting of the Club was held at the Rembrandt Hotel, Thurloe Place, on Wednesday, June 14, 1939.

Chairman : Dr. A. Landsborough Thomson.

Members present :—Miss C. M. Acland ; Dr. D. A. Bannerman ; Miss R. Barnes ; F. J. F. Barrington ; Mrs. A. Boyd-Watt ; Hon. G. Charteris (*Vice-Chairman*) ; Miss J. M. Ferrier ; Capt. H. Gilbert ; Capt. C. H. B. Grant (*Editor*) ; Col. A. E. Hamerton ; R. E. Heath ; P. A. D. Hollom ; Dr. E. Hopkinson ; N. B. Kinnear ; Miss E. P. Leach ; Miss C. Longfield ; Dr. G. Carmichael Low (*Vice-Chairman*) ; P. R. Lowe ; J. McKittrick ; C. W. Mackworth-Praed ; G. M. Mathews ; Col. R. Meinertzhagen ; R. E. Moreau ; J. H. Newman ; H. Pease ; K. B. Rooke ; W. L. Sclater ; D. Seth-Smith ; C. R. Stonor (*Hon. Sec.*) ; B. W. Tucker.

Guests of the Club :—R. A. Falla ; Mrs. R. E. Moreau.

Guests :—L. Bohmann ; Miss Theresa Clay ; H. G. Deignan ; A. R. Morrison ; Mrs. C. W. Mackworth-Praed ; Mrs. A. L. Thomson ; Mrs. B. W. Tucker.

Members, 31 ; Guests of the Club, 2 ; Guests, 7 ; Total, 40.

Honour to Mr. Mathews.

The Chairman took the opportunity of publicly congratulating his predecessor in office, Mr. Gregory Mathews, on the C.B.E. which he had received in the Birthday Honours List: it was the more appropriate that it should be mentioned on this occasion because the honour had been bestowed in respect of services to ornithology. Mr. Mathews would not be with them again for some time, as he was shortly paying an extended visit to Australia. He would receive an especially warm welcome there in view of his recent generous gift of his collection of ornithological books to the National Library at Canberra.

Two new Races of Larks from Africa.

Capt. C. H. B. Grant and Mr. C. W. Mackworth-Praed exhibited and described the following two new races :—

(1) In ' The Ibis,' 1934, p. 39, Lynes records an adult female specimen from Nasondoye, south-eastern Belgian Congo, as *Mirafra africana nigrescens*, remarking that it should be compared with the type. This we have done, and find that it differs in lacking the flank-markings and in having a shorter and more curved hind claw. Nor does this specimen agree with any other race. Through the kindness of Dr. Schouteden of the Congo Museum, Tervueren, we have had the loan of an adult male from Kanzenze (Congo Mus. no. 22741), collected by Monsieur G. F. De Witte on August 17, 1931, to which our attention has been drawn by Dr. J. P. Chapin. This specimen agrees well with Lynes' bird, except for being a rather deeper brown on the chest. Dr. Chapin, in a letter dated February 1, 1939, is of opinion that it represents an undescribed race, and he points out that Nasondoye and Kanzenze are only fifteen miles apart.

We propose to name this race in honour of Dr. James P. Chapin, as follows :—

Mirafra africana chapini, subsp. nov.

Description.—Above very dark ; blackish-brown centres to feathers very broad and narrow light edges ; basal half and

edges of feathers of crown rufous, apical half with black central streaks; below fulvous; chest more or less deeper brown, with good-sized black spots; flanks slightly deeper brown. Darker than any other race except *M. a. nigrescens* Reichw. and *M. a. nyikæ* Benson, but differs from both of these in being rather smaller; more generally darker above; and in having smaller and less strong markings on the chest; no dark streaks down flanks, streaks on head not starting at base of feathers, hind claw shorter and more curved.

Distribution.—South-eastern Belgian Congo.

Type.—In the British Museum. Adult female, Nasondoye, south-east Belgian Congo. Collected by Admiral H. Lynes on January 3, 1931. Collector's no. 1410. Brit. Mus. Reg. no. 1931.12.21.21.

Co-type.—In the Musée du Congo Belge, Tervueren, Belgium. Adult male, Kanzenze, south-east Belgian Congo. Collected by G. F. De Witte on August 17/19, 1931. Collector's no. 2119. Congo Mus. Reg. no. 22741.

Measurements of type.—Wing 90, tail 54, exposed part of culmen 16, tarsus 30, hind claw 12 mm.

Measurements of co-type.—Wing 101, tail 69, exposed part of culmen 18, tarsus 33, hind claw 10·5 mm.

Remarks.—The only specimens examined are the type and co-type.

(2) In 'The Ibis,' 1924, p. 699, Lynes places his Zalingei and Kallokitting specimens as near *Galerida cristata alexanderi* Neumann (Bull. B. O. C. xxiii. 1908, p. 45: Bautchi, northern Nigeria); and a specimen from Jebel Marra, collector's no. 452 (Brit. Mus. Reg. no. 1920.12.22.531), also agrees with the Zalingei and Kallokitting specimens, and has been named by Lynes on the original label *G. c. alexanderi*.

It appears to us that these Zalingei, Kallokitting, and Jebel Marra birds will have to be separated as a different race, and we propose for it

Galerida cristata zalingei, subsp. nov.

Description.—Size equal to *G. c. alexanderi* Neum., but general colour nearer to, though warmer than, *G. c. isabellina*.

Distribution.—Western Sudan, Jebel Marra to Kallokitting.

Type.—In the British Museum. Adult male, Zalingei, western Sudan, May 16, 1921. Lynes–Lowe Coll. Brit. Mus. Reg. no. 1922.12.8.1601.

Measurements of type.—Wing 101, tail 51, culmen from base 19, tarsus 26, hind claw 11 mm.

Remarks.—The three specimens, dated May 16/17 and June 1, are just completing the moult, have very broad edges to the feathers, and are thus more uniform rich isabelline on the upper surface than either *G. c. isabellina* or *G. c. alexanderi* ; the seven others, taken in August, September, and October, are showing distinct signs of wear, and, in consequence, the upper parts are darker, and the streaks on the chest are clearer and darker. In this worn dress it approaches in appearance *G. c. alexanderi*, but is not quite so dark.

Culmen and wing measurements of the three races are :—

G. c. isabellina.

	Culmen from base. mm.	Wing. mm.
Males (seven)	20–21	99–100
Females (two)	19–20	99–104

G. c. alexanderi.

	Culmen from base. mm.	Wing. mm.
Males (five)	17–20	99–104
Females (four)	15–19	90–94

G. c. zalingei.

	Culmen from base. mm.	Wing. mm.
Males (eight)	18–20	101–103
Females (three)	18–19	93–96

A Nestling Storm Petrel from the Canary Islands.

Dr. D. A. Bannerman exhibited, on behalf of Dr. H. B. Cott, a nestling Storm Petrel (*Hydrobates pelagicus*) from the Canary Islands, and made the following remarks :—

I have at long last received definite proof of what I have suspected for many years—that our common Storm Petrel (*H. pelagicus*) breeds in the Canary Islands. It is known, of course, to breed in the Mediterranean on the Hormigas off the east coast of Spain and on several other islands such as Malta, Corsica, Sardinia, and Elba.

In the Atlantic I believe I am right in stating that, with one doubtful exception, no breeding place has been actually discovered south of the Bay of Biscay, though I shall be surprised if it does not nest on the Berlingas.

In 1914 I published in 'The Ibis' a fairly comprehensive survey of the nidification records of the Petrels and Shearwaters in all the N. Atlantic islands—the Azores, Madeira, Desertas, Porto Santo, Salvages, Canary Islands, and Cape Verde Islands, and I then showed that although the Common Storm Petrel was reputed once to have bred on the Desertas, on the strength of three eggs in the British Museum ex Tristram coll. (said to have been collected in 1849, probably by Dr. Frere), there was no corroborative evidence, and Padre Schmitz, the well-known authority on Madeiran birds, did not consider this Storm Petrel to be a breeding bird anywhere in the group. It is, however, an occasional, not by any means numerous, visitor in winter to the seas of Madeira and the Canaries.

Exactly twenty-six years ago, in the month of June 1913, I spent a week on the tiny island of Montaña Clara in the eastern Canaries, and on the 9th secured in a cave an adult Storm Petrel with the sex organs enormously developed, which led one to suppose the female bird was nesting somewhere in the vicinity, but search as we did in that and all the neighbouring islands no trace of a nesting bird was found.

There was one rock, however, which I did not land upon—the Roque del Este—nothing more than the top of a crater rearing itself above the waves just within sight of Lanzarote, and a very difficult place to land upon. Eighteen years after my visit Dr. Hugh B. Cott, now a lecturer in zoology at Cambridge University, succeeded in landing on the Roque del Este, and some of you may recollect that he collected a number of migratory birds which he found dead on the

Roque and which I exhibited at this Club (*cf.* Bull. B. O. C. lii. 1931, p. 52).

Unknown to me at the time Cott collected a young Petrel which was put in spirit and not examined again. This was believed at the time to be a young Madeiran Fork-tailed Petrel (*Cymochorea castro castro*). A few months ago Dr. Cott sent this spirit-specimen to me for determination, and I had it converted into a skin.

I exhibit it to-night, together with the adult which I obtained myself in 1913, and you will see that it is undoubtedly a juvenile *Hydrobates pelagicus* with the down still adhering to the underparts. This definitely establishes the bird as a breeding species in the Canary Islands.

For purpose of comparison I exhibit in the same box a juvenile *Cymochorea castro castro* from the Desertas. Its much larger bill and feet would alone distinguish it at any age.

The two photographs illustrate the Roque del Este, and were taken by Dr. Cott at the time of his visit.

Perhaps it will not be out of place at this date, after a lapse of eighteen years, to call attention to some of the facts which emerged from the breeding records of the Petrels and Shearwaters in the various Atlantic island groups.

I have never really been able to understand what, if anything, governs the nesting season.

Take, for instance, the Madeiran Fork-tailed Petrel, which breeds in all the islands from the Azores to the Cape Verdes except, oddly enough, the Canary Islands. If you refer to my paper in ' The Ibis,' 1914, pp. 438–494, you will find stated on p. 453 that *C. castro* may be found engaged in nesting duties in every month of the year—the breeding season not only varies considerably in each separate group of islands, but even in some cases in each individual island of the same group. In Porto Santo, for instance, the bird has two *main* breeding seasons, the first from June to September, the second from October till December.

Does the same thing happen when the Common Storm Petrel nests in the extreme southern part of its breeding range.

Although I did not actually prove it, I believe the bird which I took in the Canaries on June 9 to have been breeding, and now Dr. Cott has taken this young bird in a neighbouring island on September 20.

Petrels and Shearwaters are very conservative, and as regards the smaller species at any rate I do not believe they readily leave a nesting colony, no matter how badly they are harried, and start a colony elsewhere. If the contrary was the case, surely we should find the Madeiran Fork-tailed Petrel breeding in the Canary group and the delightful Frigate Petrel, *Pelagodroma marina hypoleuca*, starting colonies in the Desertas, Porto Santo, or Canaries, instead of restricting its range to the Salvages and to two islands in the Cape Verde group.

There are still so many interesting problems connected with Petrels and Shearwaters awaiting investigation that I hope some of our younger members will turn their attention to this most fascinating group of ocean birds.

I am delighted to hear that that great authority on the habits of British Petrels, Mr. Norman Lockley, is leaving almost at once for the Berlinga Islands off Portugal, and then the Desertas, with a view to studying the Petrels he may find there. I have no doubt he will return with much valuable information, and I hope he will come here in October and tell us of his discoveries.

Parental Care by some African Swallows and Swifts.

Mr. R. E. Moreau gave a preliminary account of some results obtained from three thousand hours of observations at nests of Hirundinidæ and Micropodidæ at Amani. Three species of Swallow (*Hirundo*), a Rock-Martin (*Ptyonoprogne*), a Bank-Martin (*Psalidoprocne*), and three species of Swift (Micropodidæ) are resident locally, and most of them are particularly suitable for intensive observation. The ultimate object is to obtain enough data for a statistical investigation of the extent to which the rhythms of parental behaviour are specific in such a group of closely allied and associated birds.

Africans are available at Amani who have shown themselves apt and reliable for making long series of observations. Their primary duty is to record the times of the parent birds' arrivals and departures during a continuous period of at least five hours on any one day. The time rain begins and stops is also noted, an indication of its intensity being obtained from the local meteorological station. The observers are at liberty to note other events that seem to them interesting, and by this means accounts have been obtained of, *e. g.*, egg-removal by the parents and the procedure when the young make their first flight. For the five species on which attention has been focused about 60,000 events in all have up to the present been recorded, not nearly enough for the ultimate purpose in view, but enough, when analysed, to provide an indication of the behaviour rhythms of each species. Specific accounts are being prepared ; that of *Hirundo smithii* has been accepted for the Proc. Zool. Soc. London, that of the Bank-Martin for ' The Ibis.'

Hirundo smithii and the Rock-Martin (*Ptyonoprogne rufigula*) build " half-cups " stuck on a vertical face, usually close under overhead cover. *H. abyssinica* builds a " retort," often on the basis of a Ptyonoprogne nest. The Swift, *Micropus caffer struebellii*, is at Amani entirely dependent on *H. abyssinica* for providing its nests, which it lines thickly with feathers stuck all over the inside. The Bank-Martin (*Psalidoprocne holomelæna massaica*) uses (does not excavate) a hole in an earth bank.

The share of the sexes in incubation varies considerably in the five species. In *H. smithii*, the only one in which the sexes are clearly distinguishable, the female alone sits, and some of the females will not allow their mates on the nest until the young are hatched. In *H. abyssinica* both parents are constantly in and out of the nest. In the Rock-Martin collaboration is especially close. Beautifully smooth instantaneous change-overs are a feature of the incubation, and sequences of as many as a dozen occur practically without the eggs being uncovered at all. In the Bank-Martin there is no evidence that more than one parent incubates. In the

Swift both apparently do, and they spend an appreciable amount of time in the nest together.

The percentage of day-time during which the eggs are brooded varies a good deal from day to day within the species, and almost certainly is not a specific character. In each of the species dealt with the percentage covered has varied between about 30 and 70, except in the Rock-Martin, where in seven nests the variation is 50–90 per cent. (This last is governed largely by the proportion of change-overs that are instantaneous.) There is at present no evidence of tighter sitting in any species as hatching approaches, and no correlation between percentage of time incubated and "standard" temperature.

The favourite duration of the individual spell on eggs has been investigated by constructing frequency curves. The present indication is certainly that this rhythm is specific. *Hirundo abyssinica* nearly always sits 1–4 minutes, *H. smithii* 2–7, the Rock-Martin 2–12, the Bank-Martin 8–24, the Swift 11–30. The usual periods for which the eggs are left uncovered show a marked correlation, species by species, with the favourite spells "on," being 1–6, 2–7, 2–7, 4–20, and 4–30 minutes respectively. All species are, of course, liable occasionally, and for no discernible cause, to be off their eggs for much longer periods, *H. abyssinica* having the lowest extreme maximum interval and the Swift the highest.

The extent to which the young are brooded varies between the species and also considerably (and not always inversely with the number in brood) within the species. In general it may be said that the young are incubated as much as the eggs for the first 3–4 days after hatching and to an appreciable extent (at least 20 per cent. of the time) for about half the fledging period in each species. The Swift again is altogether more irregular in its attentions; there is one record of newly-hatched young (which survived) being visited only once, for one minute, in five hours.

The rate at which the parents bring food to the nest increases steadily during the first half of the nesting period. Later, and especially in the last week, a surprising degree of stability

is attained. In calculating feeding-rates the hour is an inconveniently short time-unit, and one of 200 minutes has been adopted. It seems clear that the smaller the brood the more feeds the individual receives. For example, in the Rock-Martin 1 young, 44 ; 2 young, 70, 74, 79 ; 3 young, 102, 108, 111. (Each of these figures is an average from at least 40 hours observations spread over a week.)

Especially in comparing specific feeding-rates it is necessary to exclude rainy periods, because some species are much more affected than others. The Rock-Martins become inactive when any rain at all begins. *Hirundo smithii* is not quite so sensitive, and it continues to bring food if flying termites are about in the rain. The other species seem much less affected by rain.

The averages from blocks of strictly comparable data give the following specific comparisons :—

Feeding-rate for three young in Rock-Martin 106, in *Hirundo abyssinica* 60.

Feeding rate for two young in *Hirundo smithii* 85, in the Rock-Martin 75, in the Bank-Martin 15, in the Swift only 4. There is no correlation between feeding-rate and duration of fledging period, except that the Swift is by far the longest in the nest. (This is probably on account of its exceptional wing-length rather than a result of short food supply ; it is known that in European Swifts food is brought in packets.)

A surprising thing happened when two young Rock-Martins from a nest that had fallen were transferred to another three miles away that contained only one young, about the same age. The feeding-rate by the foster parents immediately rose from about 45 to 200–300, averaging 221 for the whole of the last week in the nest.

A point in which Rock-Martins differ from all the other species is their extremely restricted foraging area. For example, at one nest for brood after brood all the insects are caught by constant sweeping in a single quadrant of a circle with radius about 40 yards and within 10 yards of the ground.

In conclusion, while it cannot be emphasized too strongly that more data are required for results based firmly on expert statistical treatment, the preliminary indications are that

certain rhythms—as distinct from patterns—of parental behaviour are specific, especially the duration of individual spells on the eggs, the duration of intervals when the eggs are left uncovered, and the rate at which the young are fed.

Wild Life in New Zealand.

Mr. R. A. Falla made the following remarks :—

To appreciate fully the changes in bird life in New Zealand it is necessary to consider the original condition of the fauna as a whole and subsequent effects of a century of European civilization.

The fauna may be considered as characteristic in the main of an extensive oceanic archipelago, but with traces, nevertheless, of conditions which must formerly have been more continental. It is difficult otherwise to account for the earlier existence of several genera and species of the large struthious Moas and of Swans, Geese, Crows, and Eagles now represented by subfossil remains. The former land-mass, whether larger or smaller, must yet have been isolated from northern connection before the spread of mammals, a class represented by only two indigenous bats. The native reptiles include the primitive *Sphenodon*. In their family relationships the endemic birds are not directly Australian, but show affinities with Papuasian stock, of which they may be regarded as a fringe. The Waders and Ducks are evidently derived from migrant arctic stock ; endemic Duck, Snipe, and Plovers are now no longer migrants, but there is seasonal movement still of other Waders to and from the Pacific Arctic. In sea-birds there is a small tropical element and a very large Antarctic one represented by Petrels, Penguins, and marine Cormorants. Of the 215 species of birds on the New Zealand list about one half are sea- and shore-birds. In the absence of mammalian predators there was a larger proportion than usual of endemic land-birds lacking either power of flight or instinctive habits of caution.

The first human inhabitants, the Maoris, cannot be considered to have had a very marked influence on plant or animal life, but the changes brought about by European settlement have

been drastic and far-reaching. The chief of these are :— (*a*) Destruction of the forest. It is estimated that forests in 1840 covered more than 75 per cent. of the country; the present area is less than 10 per cent. As the remnant is mainly in mountainous country, birds deprived of lowland forest into which they were accustomed to descend to winter have become extinct or very scarce. This has been one of the factors in the extinction of the Huia (*Heteralocha*). It is now considered that slow destruction of much remaining forest may be attributed to enormous herds of introduced deer, mainly red, but including fallow, Virginian, and Japanese. Government deer-culling operations are now accounting for tens of thousands of deer annually. Sub-alpine vegetation is also affected by herds of thar and chamois. (*b*) Introduced predatory mammals. Originally intended to deal with a prior introduction, the rabbit, stoats and other mustelids are now a menace to bird-life. With rats, dogs, and cats, they must be accounted the principal destroyers of small native ducks, some insectivorus small birds, flightless Rails, and Kiwis. It may be noted that a polecat common in some parts appears to be descended from introduced ferrets. (*c*) Introduced birds. The factor of alien avian competition has been added to the initial difficulties of the native birds and their chances of re-adjustment rendered slight. Everywhere in cultivated areas the common birds are now Starling, Sparrow, various Finches, Skylark, Song-Thrushes, and Blackbird. There are some 25 or 30 alien species strongly established, mainly European, but including Indian Myna, Australian Magpie, and Californian Quail.

In the last 25 years some equilibrium has been apparent. There has been some extension of range of a few imported birds, notably Starlings and lesser Redpoles. While many of the natives show no signs of recovery others have shown adaptability and increased slightly. The Honey-eaters *Anthornis* and *Prosthemadera* are more numerous near towns than for some years past. Kiwis, in the extreme north and extreme south (Stewart Island), are holding their own.

Ornithology in New Zealand still offers ample scope. Basic descriptive work on native birds is still needed, for the com-

plete life-histories, and distribution of half the species are imperfectly known. The study of introduced species has hardly been begun, and it offers opportunity to test the value and permanence of subspecific characters as well as habits. In comparative studies of bird behaviour primitive New Zealand genera have yet to be included. A little is being done already in these fields, and advantage is taken as far as possible by New Zealand ornithologists of the field and study technique which is being so successfully developed in Great Britain and America.

A new Race of Warbler from South Annam.

Messrs. J. Delacour and J. Greenway sent the following description :—

Phylloscopus reguloides ticehursti, subsp. nov.

Description.—Resembles *P. r. fokiensis* Hartert from S.E. China and N. Indo-China, but has more white in the tail, the outer pair of rectrices being whitish, and has a different wing formula, the second primary being equal, or less than, the 9th, usually equal to the 10th.

Type.—Male adult. Langbian Peaks, collected by J. Greenway, March 4, 1939, no. 2355, in the collection of the Museum of Comparative Zoology, Cambridge, Mass.

Remarks.—Eight specimens examined from the Langbian Peaks, S. Annam, alt. 6000 ft.

Wing-measurements: Males 59, 61, 60, 59, 60, 60 mm.; females 54, 55 mm.

Named in honour of Dr. C. B. Ticehurst, to whom all ornithologists are indebted for his excellent Monograph of the Phylloscopi.

New Races of a Rail and a Fruit Pigeon from Micronesia and Palawan.

The Marquess Hachisuka sent the following descriptions :—

Poliolimnas cinereus micronesiæ, subsp. nov.

Description.—Similar to *P. c. collingwoodi* Mathews from the Phillipine Islands, but lighter ; upper parts washed with light buff especially noticeable at the edge of wing-coverts ;

ear-coverts, side of neck, breast, and flanks light slate and not so smoky as in *P. c. collingwoodi*; belly and undertail coverts more buffish chestnut. The new race is also allied to *P. c. brevipes* (Ingram) of Vulcan Island, but the latter is much paler and washed with isabelline; therefore, the new race constitutes intermediate characteristics of the north and western races.

Distribution.—Micronesia, where it is only known from the following islands—Guam, Koror, Yap, and Truk.

Type.—Male. Yap Island, Caroline Islands, December 11, 1930, in the Marquess Yamashina's Collection, Reg. no. 8733, Tokyo.

Measurements of type.—Wing 90, tail 52, culmen 20, tarsus 40 mm.

Remarks.—Eighteen specimens of *P. c. micronesiæ* were compared with nine allied races. I have found no appreciable difference in the measurements, but the new form has on the average a shorter bill.

	Philippine Islands. culmen mm.	Micronesia. culmen mm.
Male	23–24	21–22
Female	21–23	20–21

Janthœnas vitiensis anthracinus, subsp. nov.

Description.—When held towards the light the upper surface of head, from bill to nape, is brilliantly tinged with deep purple; chin, cheeks, ear-coverts, and throat smoky-black, palest on the chin; nape and neck rich purple; breast, wing-coverts, back, and rump deep bottle-green, and the remaining under surface also has the same tinge of green, but not so rich. Primaries and rectrices black; bare skin around the eyes; bill, nostrils, and legs horny flesh-colour in the dry specimen.

Type.—Male. Lumbucan Island, Palawan. Collected by G. Castaneda; Feb. 2, 1936. In Hachisuka Collection, Tokyo.

Measurements of type.—Wing 23; tail 160; tarsus 29; culmen 19 mm.

Remarks.—*Janthœnas vitiensis* has been recorded from sixteen representative Philippine Islands, but recorded for the first time from the Palawan Region. A pair of beautiful specimens

were procured by a Filipino naturalist, Mr. G. Castaneda, of Manila, and sent to me in Tokyo. This beautiful large Fruit-Pigeon is, a as rule, a very rare bird found along the coast, and for this reason it probably escaped the attention of all the former collectors in Palawan. The new form, when compared with *J. v. griseogularis*, is smaller and the plumage has no purple tinge, especially noticeable on the breast, except on the head and nape, and the throat has no shade of grey or whitish feathers. This new race is also closely related to *J. metallica*, but the latter has more uniform metallic-green throughout the body, and the throat is whiter.

This Pigeon has also been recorded from Pula Tiga, a small island off North Borneo, and according to normal zoogeographical distribution, it probably should belong to the present new race.

I would like to take this opportunity to suggest the union of *J. v. vitiensis* and *J. janthina* group under one species with respective subspecies. I have already expressed the opinion (Hachisuka, Bds. Philip. Is., p. 206, 1932) that there is an extraordinary resemblance between *J. janthina* from the dependent Japanese islands and *J. metallica* from Lesser Sunda Islands.

We have now reached the difficult problem of determining the nomenclatorial priority between the two names. According to Dr. C. D. Sherborn's 'Index Animalium' *Columba janthina* Temminck was published in 'Planches Coloriées' in September 1830, but the publication month of *Columba vitiensis* Quoy et Gaimard in the 'Voyage of *Astrolabe*' in 1830 is not known.

Until more details are known, I shall tentatively apply *J. v. vitiensis* for the specific name of the *vitiensis-janthina* group of Pigeons. Much the same difficulty has been met with in the generic name for the Green Magpie, *i.e.*, *Kitta* Temminck (July 1826) and *Cissa* Boie (1826).

Six new Races of Australian Birds from North Queensland.

Mr. G. M. Mathews and Prof. Oscar Neumann sent the descriptions of six new races, which were collected on a Zoological research expedition, to north-western and northern

Queensland by Gabriele Neuhäuser, Ph.D., now Mrs. G. Scott. The expedition was made from autumn 1937 to spring 1938. The collection is in the possession of Prof. Neumann in Berlin.

Ninox (Hieracoglaux) connivens enigma, subsp. nov.

Description.—Differs from *H. connivens occidentalis* Ramsay, in its much smaller size.

Distribution.—Pentland, Central Northern Queensland.

Type.—A male, Pentland, April 12, 1938.

Measurements of type.—Wing 246, tail 145, tarsus 48, culmen from cere 16, from base of skull 28 mm.

Measurements of the wings of Cape York birds : 275, 286, 268, 287, 280, 283, 267, the average being 278 mm.

Eremiornis carteri queenslandicus, subsp. nov.

Description.—Differs from *Eremiornis carteri carteri* North, in lacking the decided reddish tinge on the upper surface ; the forehead is lighter reddish-brown ; the eye-stripe not so pronounced ; it is also smaller.

Distribution.—Cloncurry District of north-west Queensland.

Type.—Female. Mallan, Cloncurry, February 26, 1938.

Measurements of type.—Total length 125, wing 51, culmen 10, tail 62, tarsus 14 mm.

Males from Western Australa measure : wing 55–56, tail 63–68, while a female from Hall's Creek, the nearest locality to Queensland, measures total length 154, wing 56, culmen 12, tail 71, tarsus 15 mm.

Remarks.—The discovery of this subspecies in the western part of Queensland extends the distribution of the species.

Colluricincla phæa flavescens, subsp. nov.

Description.—Differs from *C. p. oblita* Mathews, from Pentland in having much less grey in the head ; the back and tail are brown, not grey as in *oblita* : the under surface is suffused with yellowish, recalling *superciliosa.*

Distribution.—Cloncurry District, Queensland.

Type.—A male, Mallan, Cloncurry, North-western Queensland, February 15, 1938.

Measurements of type.—Wing 123, tail 102, tarsus 32, culmen 21 mm.

Remarks.—The subspecies *Colluricincla phæa oblita* must be admitted.

The species name is *Turdus phæus* Forster 1794 ; this name is older than *Turdus harmonica* Latham, 1801.

Plectoramphus lanceolatus gabrielæ, subsp. nov.

Description.—Differs from *P. l. lanceolatus* Gould, in being smaller and in having the tail decidedly darker ; the under surface is white, not greyish-white.

Distribution.—Pentland, Central Northern Queensland.

Type.—A male, Pentland, April 14, 1938.

Measurements of type.—Wing 111, tail 102, tarsus 25, culmen 16 mm.

Remarks.—The discovery of this form so far north should be recorded.

Philemon (Microphilemon) citreogularis pseudonymus, subsp. nov.

Description.—Differs from *M. c. citreogularis* in being much browner above ; the young birds have white throats, not yellow ; no yellow on the chest or elsewhere.

Distribution.—Mallan, Cloncurry, Queensland.

Type.—A male, Mallan, February 2, 1938.

Philemon (Microphilemon) citreogularis frater, subsp. nov.

Description.—Differs from typical birds in being distinctly grey above and pure grey on the under surface.

Distribution.—Pentland, Queensland.

Type.—A male. Pentland, March 30, 1938.

Measurements of type.—Wing 135, tail 113, tarsus 28, culmen 30 mm.

A New Race of Honey-eater from Queensland.

Mr. G. M. Mathews read the following description :—

Plectoramphus lanceolatus queenslandicus, subsp. nov.

Description.—Larger than *P. l. gabrielæ* and intermediate in coloration between it and the typical form.

Distribution.—Talwood, South-central Queensland.

Type.—Male, Talwood, June 2, 1923. Collected by G. H. Wilkins. In the British Museum, No. 1925-11-1-692.

Measurements of type.—Wing 115, tail 99, tarsus 26·5, culmen 17 mm.

Two new Races from Sula Islands.

Prof. Oscar Neumann sent descriptions of two new species collected by Mr. Menden on Taliaboe, Sula Islands.

Artamus monachus sulaensis, subsp. nov.

Description.—Male and female. Perfectly similar in colour to *A. m. monachus* Bp. from Celebes, but smaller, wing 142–151 mm. as compared to 154–162 mm. in *A. m. monachus*.

Distribution.—Sula Islands (Taliaboe, Mangoli, Besi).

Type.—Male. Taliaboe, Sept. 24, 1938, J. J. Menden leg.

Remarks.—Menden collected 7 males, 3 females on Taliaboe. Wing 148–152 mm. Mr. Kinnear was so kind as to send me the wing-lengths of the three specimens, collected by Allen on Mangoli or Besi, 145, 148, 149 mm., and Hartert Nov. Zool. v. p. 133, records only one specimen, collected on Besi by Doherty, 142 mm.

Zosterops atrifrons sulaensis, subsp. nov.

Description.—Female. Similar to male and female of *Zosterops atrifrons subatrifrons* Meyer and Wiglesworth, but the yellow of the throat finer and darker, not so pale as in *Z. a. subatrifrons*, perhaps also slightly larger. Wing 56 mm., as compared to 50–54 mm. in five females of *Z. a. subatrifrons* from Peleng.

Distribution.—Sula Islands.

Type.—Female. Taliaboe, November 19, 1938, J. J. Menden leg.

Notes on Eastern African Birds.

Capt. C. H. B. Grant and Mr. C. W. Mackworth-Praed sent the following four notes :—

(1) On the Status of *Poicephalus cryptoxanthus zanzibaricus* Bowen, Auk, 1932, p. 86 : Zanzibar Island.

Through the kindness of the Zanzibar Museum and Mr. R. H. W. Pakenham we have been able to examine three adult specimens of this race from Zanzibar Island. We find on comparison that these in no way differ from the birds of the mainland from Tanganyika Territory to Portuguese East Africa. Therefore *Poicephalus cryptoxanthus zanzibaricus* Bowen becomes a synonym of *Poicephalus cryptoxanthus* Peters.

(2) On the Status of *Mirafra pulpa* Friedmann, Occ. Papers, Boston Soc. Nat. Hist. v. 1930, p. 257 : Sagan River, southern Abyssinia.

As the regulations of the United States National Museum do not allow types to be sent abroad, Dr. Friedmann has most kindly sent us three very excellent photographs which show an upper view, side view, and under view of the type.

These photographs show that *M. pulpa* is not allied in any way to *Mirafra passerina* Gyldenstolpe, Ark. Zool. Stockh. xix. (A), no. 1, 1926, p. 24 : Mohapoani, Bechuanaland, but that it agrees perfectly with specimens in the British Museum collection of *Mirafra cantillans marginata* Hawker, Bull. B. O. C. vii. 1898, p. 55 : Ujawagi, eastern Abyssinia, in pattern of plumage markings, size of bill, length of tail, tarsus, etc., as does the general description given by Friedmann. We are therefore satisfied that *Mirafra pulpa* Friedmann must become a synonym of *Mirafra cantillans marginata* Hawker.

(3) On the Races of *Mirafra africana* Smith occurring in Eastern Africa.

Sclater, Syst. Av. Æthiop. ii. 1930, p. 310, recognizes seven races in Eastern Africa ; van Someren, Nov. Zool. xxix. 1922, p. 175, recognizes three races. Friedmann, Bull. 153, U.S. Nat. Mus. 1937, p. 22, suggests that this Lark has colour

phases. Van Someren expresses the view that *M. harterti* has nothing to do with the *M. africana* group, and states that the young are very different from *M. a. tropicalis* at all ages (Nov. Zool. xxxvii. 1932, p. 335). We are not, however, told why *M. harterti* should be a distinct species or how the young differ. Hartert, Nov. Zool. xxvi. 1929, p. 164, does not recognize *M. a. harterti*, though he recognizes both *M. a. athi* and *M. a. dohertyi*.

In view of the above opinions we have carefully examined the series in the British Museum collection, and through the kindness of Dr. Stresemann of the Berlin Museum, we have had the loan of the type of *Mirafra nigrescens* Reichenow.

There is undoubtedly individual variation locally.

The British Museum has a very good series of these Larks, and a careful examination shows that only four races can be recognized in Eastern Africa, and that we are unable to agree that *M. harterti* is not a form of *M. africana*, there being no character that differentiates it from typical *M. africana*. The races we are able to recognize are as follows :—

Mirafra africana nigrescens Reichw.

Mirafra nigrescens Reichenow, Orn. Monatsb. viii. 1900, p. 39 : Elton Plateau, Ukinga, about 35 miles north of Lake Nyasa, south-western Tanganyika Territory.

A dark race ; centres of feathers of upper parts broad and black ; inner secondaries almost wholly black ; wing-coverts with well-marked black centres ; streaks on chest strong, especially on sides of chest ; flanks streaked and ends of lower flank feathers brownish ; black streaks on head starting from base of feathers, and thus no tawny bases. Wing 92 mm. ; hind claw 16 mm. long and rather straight.

Distribution.—South-western Tanganyika Territory.

Mirafra africana tropicalis Hart.

Mirafra africana tropicalis Hartert, Nov. Zool. vii. 1900, p. 45 : Bukoba, north-western Tanganyika Territory ; of which *Mirafra africana ruwenzoria* Kinnear, Bull. B. O. C. xli. 1921, p. 139 : Mokia, south-eastern Ruwenzori Mts., Uganda, is a synonym.

General tone of colour warmer and with much less black above. Wing 86–109 mm. Hind claw usually shorter and more curved, 9–13 mm.

Distribution.—Uganda to northern Tanganyika Territory from Bukoba District to the Mbulu District, south to the Iringa District *.

Mirafra africana athi Hart.

Mirafra africana athi Hartert, Nov. Zool. vii. 1900, p. 46 : Athi Plains, Kenya Colony ; of which *Mirafra africana dohertyi* Hartert, Bull. B. O. C. xix. 1907, p. 93 : Escarpment, Kenya Colony ; and *Mirafra africana harterti* Neumann, Bull. B. O. C. xxiii. 1908, p. 45 : Kiboko River, South Ukamba, Kenya Colony, are synonyms.

Colder and greyer in general tone of upper parts. Wing 87–102 mm. Hind claw similar to *M. a. tropicalis.*

Distribution.—Kenya Colony to north-eastern Tanganyika Territory at Loliondo and Ngare Nairobi.

Mirafra africana kurræ Lynes.

Mirafra africana kurræ Lynes, Bull. B. O. C. xliii, 1923, p. 95 : Kurra, Darfur, western Sudan, of which *Mirafra batesi* Bannerman, Bull. B. O. C. xliii. 1923, p. 163 : bet. Jos and Ibi, Bauchi Plateau, Northern Nigeria, is a synonym.

A vinous wash on the mantle. Wing 88–99 mm. Hind claw similar to *M. a. tropicalis.*

Distribution.—Western Sudan.

The straighter and longer hind claw of *M. a. nigrescens* and *M. a. nyikæ* Benson, Bull. B. O. C. lix. 1939, p. 85, Nyika Plateau, northern Nyasaland, would at first sight appear to be a specific character, but as these birds are in all other respects *M. africana* and the hind claws in Larks are liable to individual variation in length, probably due to the type of country they inhabit, we are of opinion that they are better left as one group.

* The single specimen from Njombe, Iringa District, collected by Lynes on December 31, 1931, has a hind claw of 15·5 mm. and therefore approaches *M. a. nigrescens* in this respect ; but otherwise agrees with *M. a. tropicalis.*

(4) On the Races of *Motacilla flava* occurring in Eastern Africa.

Sclater, Syst. Av. Æthiop. ii. 1930, p. 338, gives ten races, these being based mainly on specimens recorded in literature.

The British Museum does not possess specimens from Eastern Africa, of *Motacilla flava beema* Sykes ; *Motacilla flava cinereocapilla* Savi ; or *Motacilla flava melanogrisea* Homeyer.

Blanford, Obs. Geol. & Zool. Abyss. 1870, p. 381, records one specimen of *M. f. cinereocapilla* from Abyssinia ; Butler, Ibis, 1909, p. 392, records *M. f. cinereocapilla* from the Sudan ; Zedlitz, J. f. O. 1911, p. 45, records six specimens of *M. f. cinereocapilla* from Eritrea and Abyssinia ; van Someren, Nov. Zool. xxv. 1918, p. 284, records *M. f. cinereocapilla* from W. Elgon ; Nov. Zool. xxix. 1922, p. 183, *M. f. beema* from Kenya Colony, and Nov. Zool. xxxvii, 1932, p. 337, *M. f. cinereocapilla* from Uganda and Kenya Colony ; Meinertzhagen, Ibis, 1921, p. 666, records *M. f. cinereocapilla* from Uganda ; Count Gyldenstolpe, Sv. Exped. Cent. Afr. 1920–1, records a specimen of *M. f. beema* ; and Friedmann, Bull. 153, U.S. Nat. Mus. 1937, p. 249, records specimens of *M. f. cinereocapilla* from Abyssinia.

Through the kindness of Count Gyldenstolpe, Colonel Meinertzhagen, Dr. Friedmann, and Dr. van Someren, we have had the loan of the above specimens.

Our examination shows that Blanford's specimen is *M. f. flava* ; Butler's specimen is *M. f. flava* ; Zedlitz's specimens are *Motacilla cinerea* (3), *M. f. feldegg* (2), and *M. f. flava* (1) ; Zedlitz had himself corrected the names on the three specimens of *Motacilla cinerea*, but we cannot find that he published these corrections.

Van Someren's specimens are *M. f. flava*, *M. f. thunbergi*, *M. f. dombrowskii*. *M. f. flavissima*, and *M. f. lutea* ; Count Gyldenstolpe's specimen is *M. f. thunbergi* ; Friedmann's specimens are *M. f. flava* and *M. f. dombrowskii*.

There are, therefore, only two definite records of *M. f. cinereocapilla* and *M. f. beema*, occurring in Eastern Africa and both are in the Meinertzhagen collection, i. e., *M. f. cinereocapilla*, adult male in full breeding dress from Entebbe, Uganda, dated April 3, 1915, and *M. f. beema*, adult male in full breeding dress from Nairobi, Kenya Colony, dated March 27, 1916.

We can find no evidence that *M. f. melanogrisea* occurs in Eastern Africa.

The considerable number of specimens we have examined shows that *M. f. flava*, *M. f. dombrowskii*, *M. f. thunbergi*, *M. f. lutea*, and *M. f. feldegg* occur in the non-breeding season in quite considerable numbers, *M. f. flava* being, perhaps, the most abundant. *M. f. flavissima* is by no means uncommon, and that *M f. cinereocapilla*, *M. f. beema*, and *M. f. kaleniczenkii* are very rare. The latter is a new form for Eastern Africa, the British Museum having two adult males, one from Eritrea and the other from Abyssinia.

NOTICE.

All manuscript for publication in the 'Bulletin' should be addressed to the Editor, Captain C. H. B. Grant, The Cottage, 15a Emperor's Gate, London, S.W. 7; not to 58a Ennismore Gardens, London, S.W. 7.

Corrigenda to Vol. lix.

P. 27, line 22, *for* " *Poicephalus fuscicapillus tanganidæ* " *read Poicephalus fuscicapillus tanganikæ.*
P. 48, line 1, *for* " 15 males, 14 females " *read* 5 males, 4 males.
P. 52, line 13, for " *C. a. abingdoni* " *read C. a. abingoni.*
P. 90, line 13, for " *Columba vitensis* " *read Columba vitiensis.*
P. 90, lines 15/16 *should read*, male 204–249, female 208–223 (in two cases out of six 225 and 226 mm.) as against . . . . . .
P. 90, line 36, *for* " Teleng " *read* Peleng.
P. 90, line 4, *for* " from male " *read* from female.
P. 91, line 36, for " *T. s. petersi* " *read T. s. kinneari.*
P. 93, line 21, for " *Coracina personata schistacea* " *read Coracina schistacea schistacea.*
P. 93, line 30, for " *schistaceus* " *read schistacea.*
P. 94, line 5, *for* " against female " *read* against male.
P. 104, line 31, for " *M. n. bernsteinii* " *read M. n. bernsteini.*

24 JUL 1939
PURCHASED

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